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**The AFA**

The American Forestry Association, publishers of *American Forests*, is a national organization— independent and non-political in character—for the advancement of intelligent management and use of forests and related resources of soil, water, wildlife and outdoor recreation. Its purpose is to create an enlightened public appreciation of these resources and the part they play in the social and economic life of the nation. Created in 1875, it is the oldest national forest conservation organization in America.

# American FORESTS

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## Cover . . . . .

*An aspen-lined road in the mountain regions of the colorful Southwest is the subject of this bit of photo artistry bearing the John Kabel signature. An ax-hewn rail fence adds a rustic touch to the setting. The paper-like bark of the aspen is familiar to residents all the way from Lower California to the Yukon and eastward across the northern plains states to the Great Lakes region and on through New England. This true popular of the willow family thrives at elevations up to 10,000 feet, attains a height of 100 feet.*



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## LETTERS TO THE EDITOR

### The CVA Pot Boils

The kind of thinking evidenced in C. E. Payne's letter (commenting on the article "What You Should Know About CVA" in *American Forests* for May) published in your June issue is typical of that of a large group of our citizens, and both interests and puzzles me. The question, of course, is not that of the free flowing of our rivers but the free flowing of our savings. No doubt it is Mr. Payne's sincere belief that it is fair and equitable that part of the taxes levied against my income should be used to provide electric generating facilities on his rivers so that he can have part of the cost of his electricity free.

It is not free rivers Mr. Payne wants but free capital, and there is no repugnance to him in the idea of using the federal government to hold up me, and millions like me, taking a part of the product of our labor away from us so he and his neighbors can enjoy subsidized—partially free—electricity.

I know of no reason for Mr. Payne's placing "investors" in quotation marks in his letter. Has it been wrong for frugal people to voluntarily make their savings available to build generating plants on his rivers so that for these many years he and his neighbors have enjoyed the use of electricity at prices much lower than most of the rest of us pay? I am an easterner who covets the opportunity to become, in some small way, a capitalist and an investor by diverting to savings part of the tax-gatherer's present take.

L. V. Bower

Chicago, Illinois

In your June number C. E. Payne takes issue with A. G. Hall's excellent article "What You Should Know About CVA." Mr. Payne states, "I will mention one misstatement which I know is positively false: in the first column on page 17 you say 'Cutover lands are being sought eagerly by prospective buyers.' They are not being sought so eagerly."

It is obvious that Mr. Payne misunderstands the situation. His letter indicates that he is thinking of the conversion of cutover lands to agricultural land; whereas the context of Mr. Hall's statement shows clearly that he was referring to forest use. The tremendous expansion of industrial forestry in the Northwest has created a demand for forest properties. Mr. Hall is exactly right in saying that cutover lands are being sought eagerly by prospective buyers. In some instances, the price has been bid up as much as twenty times what it was fifteen years ago. In fairness to Mr. Hall this correction should be made.

W. F. McCulloch

Corvallis, Oregon

May I point out to the author (C. E. Payne) of a letter commenting on the article "What You Should Know About CVA," that rivers do not automatically produce electricity. Someone must provide dams, power plants and transmission lines. When the federal government does so, it must either use taxpayers' dollars or increase its inflation deficit. The "cost" on

which the government bases its prices is a partial cost, not a total cost.

I, for one, would rather pay a private utility a fair return on the money invested in its plant than pay a larger amount as taxes to the government to cover open or hidden subsidies to favored groups or to cover the inefficiency of bureaucracy.

Charles H. Porter

Tamworth, New Hampshire

### Want to Buy a Forest?

About ten years ago I purchased 240 acres and started a tree planting project. I now have upwards of 40,000 trees, varying in height from ten feet down to baby size, and consisting of red and white pine, Scotch pine, Douglasfir, spruce, white oak, ash, yellow poplar, black walnut, butternut, English walnut, chestnut, black wild cherry, etc. I have done all this singlehanded—that is, as far as finances are concerned. Now I am financially unable to carry on, much to my sorrow. I am compelled to offer my complete holdings for sale to someone who can and should carry on. Or, if you could make an appeal for funds for me to carry on for posterity, I would be glad to carry on.

As a forester, I am very well pleased to be a subscriber of such a magazine as *American Forests* whose value is beyond estimation. It is one of the greatest assets to our remaining forests, as well as to individuals now interested and becoming interested in forestry. Eventually, the day will dawn when this combination will overcome the work of erosion, the dropping of water levels, the destruction by floods, will bring back decreasing wildlife, will make a healthier atmosphere for human beings themselves. Let *American Forests* live forever, for its seeds will grow anywhere if properly planted.

Phil Brozier

Avella, Pennsylvania

### Wood Collectors' Please Note

F. H. Ferreira, 3 Hervera Court, 330 de Vries Street, Pretoria, South Africa, a member of the Wood Collectors Society, is preparing sets of short articles on South African trees. Each article, about 300 words in length, will deal with a particular tree and will be printed on a separate sheet suitable for eventual binding. It will give a brief description of the tree, its nomenclature, habitat, ordinary uses, medicinal uses and, when available, the folklore or magic uses.

Mr. Ferreira hopes to produce the first set of twenty-six articles for \$1 a set, provided a sufficient number indicate interest. On completion of the first set a second will be started and it is hoped eventually to include all South African trees and shrubs. Any person desirous of obtaining a copy should drop a postcard to Archie F. Wilson, Braeburn Road, Flossmoor, Illinois.

Archie F. Wilson

Flossmoor, Illinois



# **WISCONSIN USES SEAMAN MOTORIZED ROTARY TILLER IN CLEARING LAND OF HEAVY BRUSH**

In the Douglas County Grouse Management Area the Wisconsin Conservation Commission is using a SEAMAN Rotary Tiller (Motorized and 5 ft. in tillage width) to clear land of brush and to till for the planting of aspen, willow, hazel brush and jack-pine. Here's an excerpt from the story given in the Wisconsin Wildlife Research Quarterly Progress Reports, October, 1949:

"A 60-inch Seaman Rotary Tiller, manufactured by the Seaman Motors Corporation, Milwaukee, Wisconsin, was rented for three weeks and used to clear willow, hazel and small aspen brush in the 1948 spring experimental burn area. This machine, which pulverizes and mixes the brush with topsoil, was capable of chewing up green aspen two to three inches in diameter with one tilling. This is quite heavy going, however, and the machine is most efficient on dense stands of willow, hazel, and very young aspen. Cross-

tilling increases the degree of woody plant destruction.

"Twenty-four 25-by-50 foot quadrats have been established in tilled areas to measure the plant successions following different tilling techniques. Two quadrats each of the following types will be laid out in aspen, willow and hazel brush, and jack pine: One tilling, one cross-tilling, one 1949 tilling plus spraying a weed-killer in 1950, and "ring-arounds" on isolated patches to check stimulation or inhibition of spreading."

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## On Unification

In the April number, Robert L. L. McCormick's article, "Unification of Federally-Owned Lands," attracted my attention.

Unified administration of federally-owned forest lands is highly desirable, but, as Mr. McCormick adds, how? He offers three choices: "(1) to move the Forest Service to Interior; (2) move the Bureau of Land Administration to Agriculture; or (3) do nothing." Mr. McCormick's "Citizens Committee for the Hoover Report" is behind the Hoover Commission report without change. The majority of the Commission recommended plan 2. But some of the members preferred a fourth plan. This plan had the support of the Commission's Task Force on Natural Resources. This plan has so much merit, in my opinion, that it deserves further consideration. It calls for a Department of Natural Resources (see "The Case For a Department of Natural Resources" by Leslie A. Miller, November 1949, issue) to which would be transferred "the functions of the Bureau of Reclamation, Geological Survey, Fish and Wildlife Service, Bureau of Mines, Oil and Gas Division, Bureau of Land Management, Forest Service, National Park Service and related research activities." Although it calls for a new department of cabinet status, it carries out the basic idea of the Hoover plan of unification, in fact, this desirable end would be better met than under either plan 1 or 2. Why?

By owning and managing about 500 million acres and the resources on or in this area—five times the size of California—the federal government is in business in a very big way. It spends money to manage and protect these lands and collects many millions of dollars from the sale of resources or from rentals. Such a huge business should not be directed by a service agency like Agriculture or Interior, but by a department set up and operated on a business basis. Its secretary should be a man selected less for his political qualifications than for his organizational ability and business acumen. The department would have two divisions, one for the renewable resources (timber, forage, wildlife) and one for the non-renewable resources (metals, oils, etc.). Possibly there should be a third division, set up for water resources separately, although these would be ordinarily included in the first.

There would be complications, of course, as there are now and would be under any of the Hoover plans. The Forest Service, for example, is not required by law to manage its property within income, as is the Bureau of Land Management, which

has been doing a splendid job, spending less than twenty cents of each dollar taken in. Recently this bureau, like so many originally good bureaus, wants more of the income. The Forest Service returns twenty-five percent of its take to the affected counties, the Bureau of Land Management returns fifty percent.

By having all these functions in one bureau, an overall policy can be set up, based on the wisest and best use for the country as a whole. At present, each bureau goes its merry way competing with the others for public approval, often by placating the people; and each endeavors to develop its own fields without regard for the interests of the resources of the others.

As to research, why does it have to be in Agriculture? Even at present the Bureau of Land Management, the Indian Forest Service and the National Park Service, all in Interior, depend for much of their research on the bureaus of plant industry and entomology and pest control in Agriculture. And always have. In fact, the Interior foresters in very important instances were first to adopt and implement Agriculture's research results, while Agriculture's Forest Service was slow in doing so. It denies the fourth point of logic offered by Mr. McCormick, that the timber properties should be in the same department as research.

As to farmer's woodlots, activities in connection with advice to the owner should be handled by Agriculture's very effective Agricultural Extension Service. After all, the woodlot is part of the farm. There's no good reason why the extension service should not have the extension foresters on its own staff, directed by the same county agent directing the agricultural extension men. At present several bureaus from Agriculture call on the farmer and there is little, often no coordination—and sometimes jealousy. Let Agriculture deal with the farmer for all of his farm. This leads me to add another comment in support of a separate department of natural resources.

Forest land management is definitely not agriculture. Trees do grow in soil like field crops, but their management, their protection, their utilization and the economics involved are altogether different. If forestry is agriculture, one might ask why is it not treated as such politically, i.e., as to subventions, price supports and the like, none of which are wanted by the forest owner.

It is the main job of the Forest Service to manage the national forests; of the Bureau of Land Management to manage the O & C forest lands and grazing districts; of the Park Service to manage the national

(Turn to page 29)

## AUTHORS

**HARRY BOTSFORD** (*I Was Bitten by a Bass Bug*), a New Yorker who really likes to fish, has authored numerous angling (and others, of course) articles for national magazines. **DR. ARNE E. CARLSON** (*Controlling "Forest Predators"*) is with E. I. du Pont de Nemours and Company of Wilmington, Delaware. **JAMES B. CRAIG** (*America In Their Hearts*), with experience on Ohio and Maryland newspapers, and recently associate editor of *American Forests*, now heads the New York information bureau of American Forest Products Industries. **NELSON H. FRITZ** (*Forestry Assignment in Korea*) was Provincial Forestry Advisor with the U. S. Department of Army, Military Government in Cholla Pukto Province, Korea, during 1947 and 1948. **JAMES STEVENS** (*Time and No Fire*), well known author, also serves as information director for the West Coast Lumbermen's Association at Seattle. **STANLEY P. YOUNG** (*Rabies in the Wild*), biologist, is in charge of the Section of Biological Surveys, Branch of Wildlife Research, Fish and Wildlife Service. He is now at the National Museum gathering material for a book in the Service's series on North American fauna.

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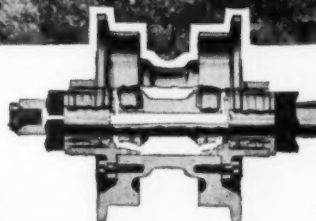
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# FORESTRY ASSIGNMENT IN

# KOREA

By NELSON H. FRITZ

*Photographs by the Author*



Pagoda in fallen Seoul

An American forester who helped start South Korea back on the road to forest recovery reviews his two years in this ancient land

JUST two short years ago, as a forestry advisor with the United States Army Military Government in Korea, I looked down from the mountains near Kaesong and Chunchon upon the wide valleys of the Yesong, Choyang, Imjin and Han rivers. They were peaceful then, with their small farms and grass-roofed huts, for South Korea is predominantly agricultural. Seventy-seven percent of its nineteen million people are growing farm crops.

Everywhere was the familiar pattern of rice paddies flanked on higher ground by other cultivated fields and, still higher, by sparsely forested foothills. Rough tree-lined roads snaked from village to village—the trees planted not for aesthetic reasons but for their leaves, which are stripped several times each year and scattered over the paddies for the nitrogen

they produce. In a land as old as Korea, fertilizer, and particularly nitrogen, is the lifeblood of agriculture.

Yes, wherever I looked it was a tranquil scene. Here the ever present bull, beast of burden throughout Korea, pulled an ancient straight-beam plow through the mud of a rice paddy. There in a forest nursery women workers filled transplant beds with one-year seedlings, while close by orchardists tended their trees. Gone were the days of Japanese oppression, with the people looking forward to unification in a free and democratic Korea.

All this is changed now. As this is written, tanks are rolling down from north of the 38th parallel, spreading death and destruction in their wake. The former peaceful valleys of the Yesong, Choyang,

In recent years, rice has occupied forty percent of the planted area of Korea. Here is a typical rice paddy, with the ever present bull and plow





Imjin and Han have been overrun by communist hordes. Seoul, with its two million population, has fallen. This ancient city, established as the capital of Korea during the Yi dynasty of the fourteenth century, I remember well. Not only because it was headquarters for our Forestry Bureau, but it was here I lived for a while with other American specialists in the Castle, former residence of the last emperor's son-in-law. Built by a French architect in 1902, this imposing edifice, standing on a mountainside, overlooks most of the city, including the capitol building, a replica of the Norwegian capitol at Oslo.

Suwon, twenty miles to the south, also has fallen—Suwon with its historic South Gate which has stood for 500 years as a symbol of the country's invincibility. Here at a well-developed agricultural research station, American scientists under the military government made real progress in improving South Korean crops and introducing modern husbandry methods.

Like many other Americans accepting technical assignments in Korea, I knew very little about this ancient land. But as provincial forestry advisor of Cholla Pukto, I learned fast. And one of the first things I came to know was that the history book picturization of Korea as the "Switzerland of the Orient," with

beautiful mountains and wide valleys, verdant with natural forests of pine, fir, spruce, birch, larch, maple and bamboo, was outdated. That isn't the Korea of today. Although seventy-four percent of South Korea is classified as forest, it is poorly stocked or denuded. On hills and mountains around its cities the situation is so bad that an alarmingly advanced state of erosion has set in. Furthermore, under present conditions (before the communist invasion), South Koreans are taking from their forests each year half again as much wood as the timberlands produce.

For a clearer understanding of what has happened, it might be well to turn back the pages of time for a brief look at Korea's long history. For Koreans are an ancient and homogeneous race, distinct from both the Chinese and the Japanese. Their civilization, one of the oldest in the world, goes back in legend 4,200 years to Tan Goon, its mythical founder, who in the twenty-fourth century before the birth of Christ, led primitive tribes from the north and from Manchuria to establish the nation which he named Chosen—"Land of the Morning Calm."

Up to 1910, when it came under the rule of Japan as a result of the Russo-Japanese War, Korea had enjoyed a stability and continuity equalled by few nations. Only three dynasties, the Silla, Koruy and Yi,

ruled the country from 669 A.D. to 1910. During this long period of self-rule, beginning with the "age of enlightened progress" in 918, Koreans invented the spinning wheel, movable metal type, astronomical instruments, surveying instruments, the mariner's compass and the observation balloon.

The world's first iron-clad battleships were built by Korea; and it was one of the first countries in the Far East to adopt a public system of education. Interesting also is the fact that the oldest and most continuous records of rainfall are in Korea. As early as 1442 instruments were constructed to measure precipitation, and shortly thereafter rain gauges were placed in each of its eight provinces. Records have been continuously maintained.

But as progressive as the Koreans were in so many ways, they were unrestrained exploiters of the earth's resources. When the Japanese moved in during the early part of this century, erosion was on the march, rivers were silting in and valleys were filling up with mountain soils. Where forests were concerned, there was ample evidence of centuries of unscrupulous slashing and abuse.

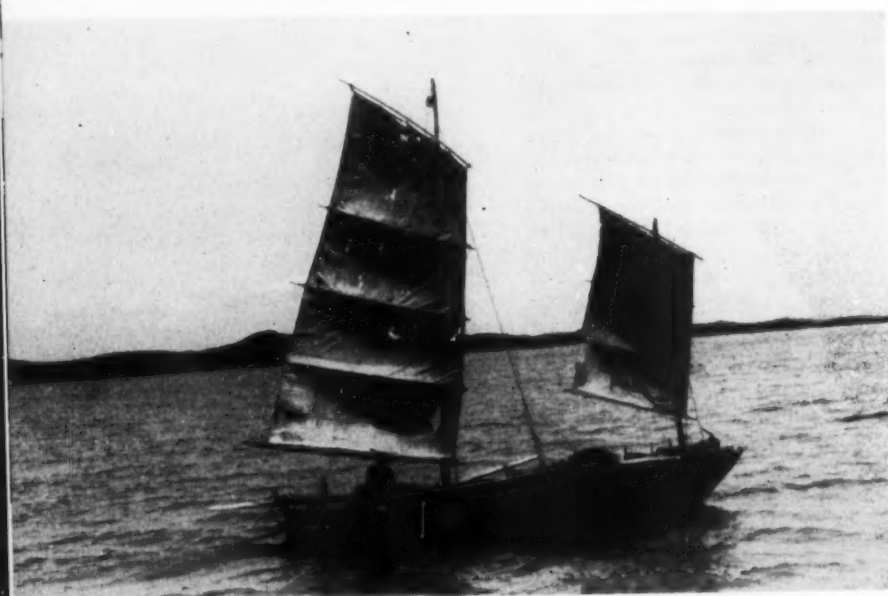
With eighty percent of the country's forests in public ownership, the people, throughout the years, seemed to have enjoyed the freedom of exploiting these timberlands at

Seventy-three percent of South Korea's twenty-two million acres are classed as forest land, the great bulk of it denuded or poorly stocked. This mountain range west of Mujo, Cholla Pukto Province, is typical, with denuded area in foreground





Most of Korea's food is produced south of the 38th Parallel. Above, rice paddy near Chinan — below, fishing skiff on the Kum River near Kunsan



With hills and mountains, especially around cities, in an advanced state of erosion, South Koreans must continually fight the menace of floods



will—and they slashed and cut without restraint. When these state forests became exhausted, the twenty percent remaining in private ownership were thrown open to the people and these, too, were soon on their way to oblivion. In 1910, when the Japanese annexed the peninsula into the empire, they found but a few scattered remnants of once fine forested areas.

The Japanese were quick to see the folly of Korea's ruinous forest practices. And they moved fast. The cutover state lands were leased to individuals who would replant them—and when the plantations were established, the properties were transferred to these individuals. At the same time they put into effect stringent regulations: (1) established forest lands were to be protected to encourage natural reproduction; (2) cutting practices where young growing stock was concerned were placed under strict control; and (3) greater emphasis was placed on growing wood for fuel instead of other products so as to more adequately meet local fuel requirements while at the same time increasing forest profits.

Next the Japanese launched a long-range program of reforestation. They began by planting denuded hills adjacent to all the larger cities and towns. This was designed to control erosion while producing a future timber supply. To commemorate the death of the first Emperor of Japan, April 3 was set aside as a national Arbor Day. Everyone had to participate and, by 1935, four billion seedlings had been planted. So effective were these measures of reforestation and controlled cutting that, by 1940, the forests of Korea were beginning to supply the demands of the country.

Then came the war. As carefully as they had planted the mountainsides of Korea, the Japanese now ruthlessly stripped them. Overnight, reforestation work of years was discarded as millions of trees were turned into forest products to supply the war machine of Japan.

They discovered that oil from the roots of Korean pine could be manufactured into synthetic petroleum products and, desperate as they were for gasoline and lubricants, they denuded thousands of forested acres for these roots.

When the United States Military Government moved into South Korea in 1945, the situation was chaotic. Infestations of bark beetles, wood borers and other insects were depleting the little timber that was left.

Many Koreans were burning off thousands of acres to acquire more farm lands. Others were maliciously tearing out young trees and cutting large timber tracts, leaving the trees to rot where they fell. The Japanese had planted those trees and Koreans wanted no reminders of Japan. Here was intentional forest devastation on a large scale.

Through all this confusion and emotional chaos, American foresters were able to draw this picture: South Korea, in the past, had drawn chiefly upon North Korea—that section of the country north of the 38th parallel, now behind the iron curtain of the communist world—for a large percentage of its lumber and other wood requirements, including fuelwood. Also, most of the coal used in South Korea came from the north, as well as from Manchuria and Japan. With the first two sources of supply now completely cut off and very little lumber or fuel coming from Japan, demand on South Korean forests for fuelwood as a substitute for coal, particularly in industry, was staggering—further demand on the already heavily overdrained woodlands.

At the same time, the need for food in South Korea was so pressing that new land was being cleared for crops. Only steep slopes and very poor soils were left for trees.

Of the twenty-two million acres in South Korea, sixteen million were classed as forest land. But most of this was badly understocked and in young trees. Only six percent, or a million acres, were in trees sixty or more years old; nine percent, or a million and a half acres, were in trees from forty to sixty years old; nineteen percent, or three million acres, were in trees from twenty to forty years; and forty-seven percent, or seven and a half million acres, were stocked with trees under twenty years of age. Nineteen percent, or three million acres, were cutover and denuded lands.

With such a large portion of the forests in the younger age classes, they are producing far less wood material than they could be made to produce under proper management. The annual growth of wood material in the forests is estimated at around 113 million cubic feet, the annual cut around 168 million cubic feet—in other words, the take is half again as much as growth.

During the Japanese occupation, an average of better than 200 million trees a year were planted up to 1939—in some years as many as 300 million. On the erosion control side,



A group of Korean foresters, above, with Arthur Schneider, their American advisor. Below, planting chestnut seeds in the forest nursery near Kumyang



During Emancipation Planting Day in 1948, young and old, rich and poor, turned out to plant millions of trees on barren hills in Cholla Pukto Province





more than 330 million acres were terraced and planted by the Japanese. The results of this terrace planting were amazing and "before" and "after" photographs, taken twenty years apart, attest to the practical and economic value of the work.

The war, of course, put a stop to this program—and the effort of the American military government was to re-establish and increase it, mainly by advising and assisting the South Korean government of President Syngman Rhee.

Briefly, what the forestry phase of the military government set out to accomplish—and had made good progress up to the time of the communist invasion—was (1) a greatly accelerated program of reforestation and erosion control, calling for a planting of 550 million trees annually for ten years, or about 550 thousand acres a year; (2) better protection against fire and timber theft; (3) the building of access roads to the few remnants of mature timber; (4) to reverse, when pos-

and, most important of all, trees by the millions were planted.

In Chonju, capital of Cholla Pukto Province, and my headquarters in 1948, preparations were started the previous November. Planting areas were selected, sites were studied on the ground and allocations of seedlings were made for each county, township, city and village. Forest nurseries (we had fifty-seven in the province) were beehives of activity. Seedlings and transplants were taken from their beds, root-pruned and tied fifty to a bundle. These bundles were than "heeled in," in long, regular rows by separate species, there to pass the winter in preparation for spring planting. There is no fall planting in Korea.

Plans continued until late March. Then Forestry Section trucks, laden with one and two-year seedlings and transplants, wound their way through the mountain passes to the north, east, south and west. This distribution was an enormous task for the number of trucks was limited and

ing a place in the sun preparing for their day's work; candymakers were starting fires in tin cans to concoct their molasses mixtures.

Kim, Su Bon, an appealing youngster, was waiting for the daily candy bar I gave her on my way to breakfast. Greetings of "*Ut-duss-sim-nik-gah*" (hello) and "*Ahn-n'yung-hah-sim-nik-gah*" (Did you have an honorable rest?) were exchanged between passersby. Everything was under control and seemingly normal—but not quite.

The Korean flag with its Absolute and Diagrams began to appear in front of houses. Within an hour, hundreds of flags bedecked the streets. The celebration had begun. Music was heard and soon a school band marched by, leading a procession of students, neat in their black uniforms. Now the streets were filling with men and women, boys and girls hurrying to Lee Park where ceremonies, appropriate to the day, would be held.

By nine o'clock, parades were pass-



sible, which means when coal or oil is available, the present trend toward using wood in industrial plants for fuel; and (5) an educational program to get Korean public sentiment behind the overall forestry program.

To stimulate the tree planting program, the Forestry Bureau in 1946 observed, between March 1 and April 10, an Emancipation Planting Week during which ninety million seedlings were planted by various Korean organizations. This program was repeated each year, with an increasing number of trees being set out, up through the 1950 planting season. From Seoul, the nation's capital, to the smallest village, celebrations were held. There were parades, speeches

rationed gasoline and tires were at a premium. But the seedlings of chestnut, oak, alder, larch, pine and locust reached their destinations.

When Emancipation Planting Day, April 5, arrived, it was clear, bright and warm in Chonju. The early hours were typical of any day throughout Cholla Pukto. Smoke curled from the chimneys of the grass-roof houses; vendors hawked their wares of bean cakes, sprouts and fish; shopkeepers, with corn straw brooms, swept the dust from the streets in front of their stores; naked children washed in the running water of the gutters; corner astrologists, with their tall horsehair hats and three-foot pipes, were find-

ing through the streets. Floats and costumes predominated the line of march, reminding me of the Mummers on New Year's Day in Philadelphia.

Many times the three animals, symbolic of Korea, passed in review. These are the tiger, the owl and the dragon, representing, respectively, strength, wisdom and mystery. Banners displayed the weird astronomical animals of direction—the black tortoise of the north, the blue dragon of the east, the white tiger of the west and the red griffin of the south. A large truck swung into view. On its side hung a huge oil-painted canvas depicting good and bad forest practices.



Following the parade came the men and women of Chonju and its environs, each carrying a spade, a shovel, or a handmade dibble.

By ten o'clock around 10,000 people had assembled at the park where a public address system was installed. After an impressive flag-raising ceremony the speakers, each wearing a white paper rose (these were collected after the ceremony to be used again), were introduced.

With the formal program at an end, the milling thousands lined up to receive a package of lunch, a bundle of seedlings and a designated planting area. Soon the surrounding mountains were dotted with natives planting their respective plots. I planted my fifty trees on the hillside of Lee Park. Trucks took boys from the various schools to rural areas where a mountainside had been assigned each school for reforestation. In all, it was a wonderful sight to observe these thousands of Koreans, young and old, rich and poor, intent on a single purpose—planting trees.

Will these trees reach maturity? Will Korea's once fine forests be restored? Or will the people strip these young trees from the hills? There is a desperate need for fuel—and, sad to relate, it is not an uncommon practice for villagers to steal thousands of newly-planted trees and sell them to tile factories whose furnaces require terrific heat. Young pine needles supply this heat and the villagers are always hungry for money. Will erosion be conquered and the control terraces kept green? Or will rivers continue to flood on their way to the sea?

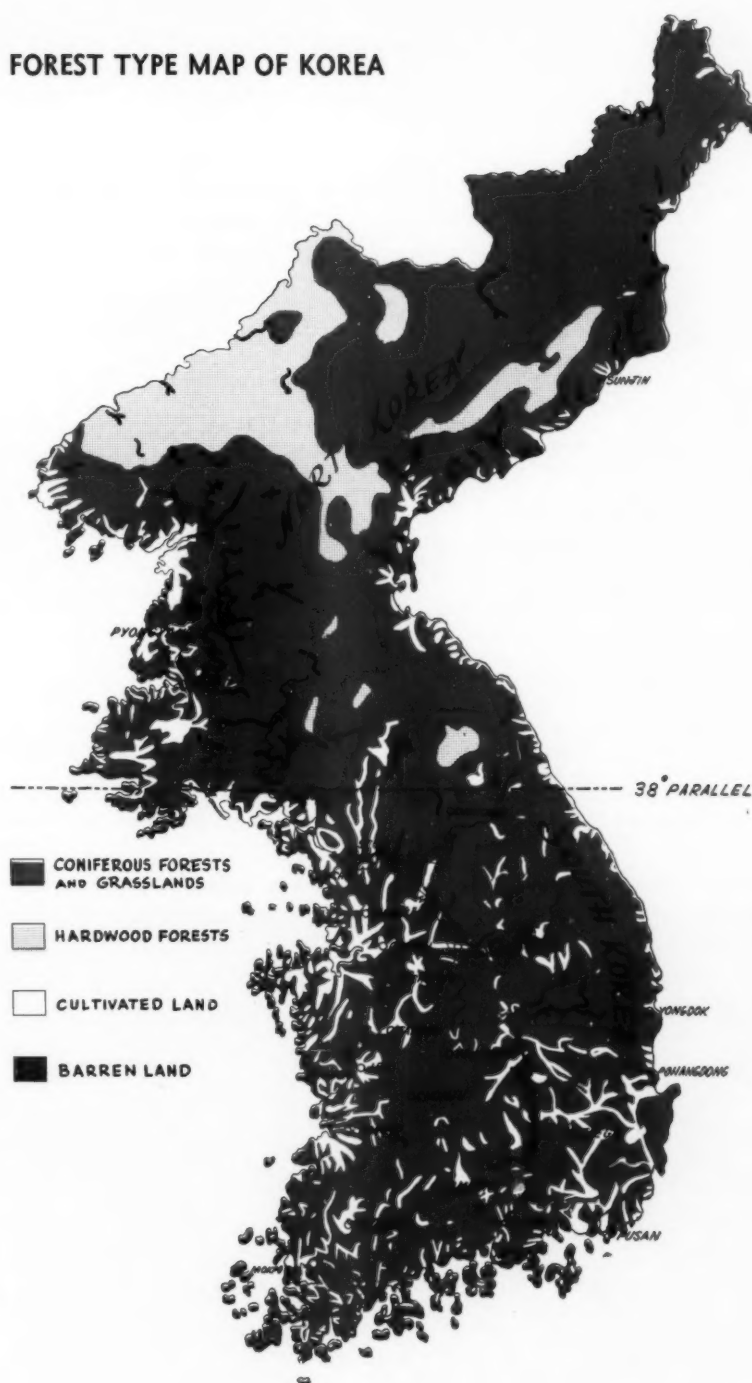
These are important questions. They were important to the American foresters who drafted a management plan for Korean forests. They are important to the future of Korea.

For a long time now Koreans have

Picturesque gargoyle fire guard—one of two that stand in front of the capital building at Seoul



## FOREST TYPE MAP OF KOREA



been fighting for freedom and independence. For a long time their forests have been fighting for existence. Prior to the communist invasion there were signs, in South Korea at least, that the battle was being won. American foresters, like other advisors and technicians provided by the military government, shaped their programs to this

end. Whether or not, in view of the present conflict, these gains can be held is something only the future will reveal. If they are—and if progressive plans already developed are carried out, the ancient "Land of the Morning Calm" stands a good chance to become once again "verdant with natural forests," to quote the old history books.

# America in Their Hearts

The Boy Scouts of America, in National Jamboree at Valley Forge, are turning their "good deeds" in a direction that speaks well for the land future of the nation

By JAMES B. CRAIG

JUDGING by the opinions expressed by a number of boys at the recent Valley Forge Jamboree encampment of 47,000 Boy Scouts, a sizable segment of the two-and-a-half million scouts in America have already made up their minds to be forest rangers.

A scout from Oak Ridge, Tennessee, engaged in carrying on a prosperous trading venture with neutron irradiated dimes—and he had a Geiger counter to prove it—said no, he wasn't planning to be an atomic scientist, he was going to be a forest ranger.

A Wisconsin boy whose chief aim in life appeared to be cornering the

Texas horned toad swap market, stated that business was just a sideline with him, that he planned to be a forester.

A New Jersey scout who brought a brace of carrier pigeons to the encampment so he could more easily send daily messages to his parents, said he might take up ornithology as a sideline but that he was headed for forestry.

Two Idaho boys who were engaged in policing their camp said they plan to double in brass. They will be foresters in the winter and smoke-jumpers in the summer.

However, scout leaders aver that any mental image of forestry schools

of the future bursting at the seams is premature. Many of these boys actually won't follow through on their adolescent plans, they say.

But this mounting interest in forestry and related subjects does pointedly illustrate one thing—that a lot of good, sound conservation teaching has rubbed off on scouts all over America. This is due mainly to the efforts of half a million adult leaders who haven't forgotten that conservation is a new and exciting adventure for each generation of young Americans. These leaders know that the seeds of first instruction drop in the deepest furrows.

It is quite natural that teen-age

**They came from all corners of the nation, bearing well their responsibility for the America of tomorrow**



boys should be picked up and carried away by the drama inherent in conservation activity, according to E. H. Bakken, director of rural scouting in America. As he points out, the scouting program is built on action and service and for the most part is carried on in the outdoors. Thus its call for leadership is to practical men—men with outdoor skills, love of nature, and who have humanity in their hearts.

The man in the boy is always reaching up to the boy in the man, scout leaders say, and it is in the outdoors where these relationships are most closely cemented with both leaders and boys actively engaged in pursuits in which both are tremendously interested.

Some time ago a group of sportsmen in York, Pennsylvania, set up a plan for each sportsman to take a boy with him on at least one fishing trip. One boy taken on such a trip led the sportsman along the stream, tiring him by his eagerness to see what was around the next bend. Several times the man felt like suggesting they turn back. But he resisted and followed.

Finally as the sun sank in the reddening sky the boy turned and said, "Now let's go home." Then, as he paused, the man was paid in full, for the boy continued—"You know, this is the first time anyone has gone with me as far as I've wanted to go."

It is to the great credit of thousands of scout leaders that they are going as far as their young charges want to go. At the Valley Forge Jamboree, an explorer scout from Alabama told how his counselor, a consulting forester, had spent many hours helping him set out seedlings on an eroded hill on his father's farm. Another scout from Kansas told a similar story—of a county agent who had helped him set out a grove of nut trees. In the West, many foresters spend their evenings instructing scouts in the rudiments of fire prevention work.

The primary objective of scouting is, of course, the development of character in boys. But many land-use organizations and agencies, along with the forest industries, which are interesting more and more scouts in tree farm and "Keep Green" work, recognize that the vigorous outdoor program sponsored by scouting is and can be an increasingly tremendous force in American conservation.

Scout leaders recognize this, too. As one leader at national headquarters in New York said, "The simple truth is that scouting will have to step up its conservation program



General Dwight Eisenhower with Scouts at the Valley Forge encampment

more and more because the boys themselves are demanding it."

There is every indication that this will be done. Just since the Jamboree, scout leaders have been discussing plans to place major emphasis on conservation projects for all 600 thousand explorer scouts in the nation.

Meanwhile, conservation-minded organizations which recognize that scouts are really on their team are going all-out to give this move impetus. Only recently the Women's Auxiliary of the Veterans of Foreign Wars voted a \$500 annual scholarship for the scout who has shown the greatest all-around proficiency in conservation projects. Starting next summer the Izaak Walton League, in conjunction with the U. S. Forest Service, will send two selected scouts to each of the Forest Service regions for basic training in forestry work. The forest industries have contributed major support, especially in helping to initiate visual aids to promote the rural scouting program.

What specifically have scouts done in conservation channels? Well, reports from seventy-six percent of the 70,000 scout units in the nation last year showed that 14,971 units worked in food conservation; 9,887 in food production; 6,190 in tree planting; 3,411 in aid to state and national forest services; 6,658 in protection to wildlife; and 4,699 in additional soil and water conservation projects.

In carrying out these various projects, scouts planted 1,285,000 trees, built 59,613 bird shelters and feed-

ing stations and helped raise 1,532,000 pounds of food. Over 110,000 scouts did fire prevention work.

But who can measure the future importance of scout leaders explaining to boys, in the light of flickering campfires, that the "good turn" credo of scoutdom also applies to the land, our forests, wildlife and water? For as Emerson explains, "Sow an act and you reap a habit; sow a habit and you reap a character; sow a character and you reap a destiny."

As Rural Leader Bakken once commented, "If you would determine whether America will erode itself to destruction, watch the schoolboy in the spring, or his group at play, or the amount of guidance he is getting from men and women with America in their hearts."

A key reason for the mounting scout interest in conservation is the tremendous growth of rural scouting since the war. More than half a million boys are now enrolled in rural areas and Mr. Bakken's rural advisory group hopes to celebrate scouting's fortieth anniversary this year with another bumper crop of boys.

Rural boys have a natural affinity for the soil and all growing things and it was significant and fitting that Preston Koentop, the twelve millionth scout to be enrolled since the origin of scouting, when introduced at the rural committee meeting in Philadelphia, discussed his various activities on his father's 150-acre farm in Wisconsin.

"The country boy is, of course, of (Turn to page 39)



Photos by Forde and Carter

## Time and No Fire

**Burning—even slash burning—is wrong-way forestry, says Billy Entwistle, dean of West Coast fire preventionists. And he should know, for he has been a timberman since 1876**

By JAMES STEVENS

**W**E stood on a shoulder of Blue Mountain and looked out over 75,000 acres of young Douglasfir forest. It was cool, green country under a hot summer sun, fair to see but with fear in it, too. This was the fishing season—this was the time of the tourist. Main-traveled roads ran many ways down there and the trails were well-worn. Up on the peak of Blue Mountain the fire lookout and his wife were keeping a sharp watch for smoke.

"All that the trees down there need," said Billy Entwistle, "is time—time and no fire."

He had been looking out on Puget Sound timberland since 1864, while his time as a worker in the woods was

dated from 1876. Billy Entwistle could look away westward in the haze, no spectacles required, and make out the shore of Whidbey Island where he greased the skids for Frank Dolan such a long time ago.

"Frank Dolan had a heart," Billy said. "Why, if his heart had been any bigger he couldn't have made it through a saloon door, which he did real often."

Then Billy lowered his sights down to 1906, which he guessed was the first year forest-fire prevention signs were ever put up in the woods of the West. The posting was on the then new Douglasfir region holdings of the Weyerhaeuser Timber Company. Frederic Weyerhaeuser had a realistic

vision of the menace of fire on the future of the Douglasfir forest. His western manager, George Long, went to work on it. As an early result Billy Entwistle toiled up many a trail to nail up signs that simply and emphatically read "NO FIRE." It was something revolutionary in the life of the big timber country. Burning was still considered a vital necessity in Douglasfir logging.

In 1908, this early West Coast fire fighter said, George Long fathered the Washington Forest Fire Association, and Entwistle was the first fire warden signed up and put out on the trails to visit the logging camps and educate the loggers and stump ranchers.



"I was sometimes in danger of being strung up," he said. "That's how unwelcome the 'No Fire' doctrine was. A foreman would holler, 'You think I've nothing better to do than putter around with fly screens on the stacks of my donkeys? Hmm? If I don't set fires to burn out roadways, how am I going to have roads? Hey? And if you keep after me this way, how am I going to keep from being sent up for manslaughter? Tell me that—no, don't. Just git!'"

Billy Entwistle would depart—but he would return.

Now he had lived to see inspiring progress in forestry as an act on the land. The lands down there had been logged off mainly between 1910 and 1940. In the 'twenties many fires had hit them but none had got away. He could point out patches of third growth. He owned a memory for just about every spot of the area in sight, including Everett in the haze, Whidbey Island, the dimly seen Olympic Mountains. All had been complete wilderness in 1876. Then ax, and fire. In the 'twenties the people of the woods took smoke-clouded skies as a summer evil that was no more to be

done away with than winter fog. Yet the fire fighters and the fire-prevention evangelists of government and industry kept increasing their drive, and Billy Entwistle kept out in the lead. So he did in the 'thirties and 'forties, until retirement was forced on him.

Well, here it was, the work of all hands in the effort that had begun with the simple posting of "NO FIRE" signs in 1906. There lay the land, deep in summer heat and dry spell, and not a smoke showing in the haze. There the trees were growing, north, south and west, thick and thin, dark and light, but everywhere—trees that had started in the infancy of Douglasfir forestry. Plainly it was green glory to Billy Entwistle. He stood and remembered, he stood strong in pride, and in hope and faith in the land. Now everybody was sounding "NO FIRE—KEEP WASHINGTON GREEN" as a battle cry. Good doings.

We again took to the cars that had brought us from Washington State Forestry Headquarters at Sultan, old-time logging town of Snohomish County. State District Forester Harry

Osborne, Fire Warden Henry Knutson, Cub Scouts Harry Kaiser, Stuart Linse and Kenny Westcott were in the pilot car up the rocky road to the lookout. Our business was to start a "Keep Green" poster program for all the Scouts of the area. Billy Entwistle was the main attraction.

The land of old cutovers and new trees left below us was in private and state ownership. Looking north from the Blue Mountain tower toward storied Pilchuck's slopes, we saw the "stubble" of present-day logging on both private and federal lands. Some of it was black from last fall's slash burnings. Billy Entwistle had some hard words to apply to the burn.

"It's wrong-way forestry," he declared. "Old stuff. With the markets of today taking every stick of any kind that comes out of the timber, slash-burning is only a bad habit that hangs on. I want to show you boys a new fir crop that has grown on a 1918 cutting where no fire followed. Not even a slash-burn."

East were the mountains, green slopes of the Mt. Baker and Snoqualmie national forests rising to rocks  
(Turn to page 44)

Today pioneer conservationist Billy Entwistle is busy rallying youth to the cause of forestry. At left, he examines annual rings of a giant Douglasfir with Cub Scout, while at right other members of the troop help him post a "Keep Green" sign





## 75th Anniversary Meeting

Citizens of Northern Wisconsin to be host to members of The American Forestry Association in new type of annual meeting — a gigantic conservation caravan

**N**ORTHERN Wisconsin's bright blue October skies, glorious autumn foliage, famous resorts and an entirely new conservation caravan program beckons you to the 75th Anniversary meeting of The American Forestry Association at Eagle River, Wisconsin, October 9, 10, 11.

These pages reveal what you may expect to see and enjoy during three days that will remain as an unforgettable experience.

First of all, the Eagle River region was selected as the site of this historic meeting for three reasons:

AFA membership has grown in stature. It is no longer content to sit and listen to what has gone on in the past—or what is projected for the distant future. Men and women of the Association are keenly aware of the role our natural resources play in their daily lives. They want to see for themselves the progress being made today in resource management.

Without traveling great distances, there is perhaps no other region in the country with a similar concentration of natural resources at work—soil, water, forests and wildlife management, based on a sound land use pattern. There is also a coordination of effort on the part of industry, state and federal agencies that has attracted national attention.

While tucked away in the heart of the state's vast forest and recreation region, Eagle River itself is easy to



**All tours will start from the picturesque Conservation Camp operated by Trees for Tomorrow, Inc., near Eagle River**

reach by train, plane, bus, or car. Modern hotels, resorts, lodges and picturesque cabins provide the comfort and type of accommodations you wish to select in a natural setting of outdoor beauty.

Now for the core of this unique program. It is being worked out for you by thirty-six of Wisconsin's prominent citizens under the direction of Folke Becker, president of the Rhinelander Paper Company, head of the Trees for Tomorrow organization, and an honorary vice-president of The American Forestry Association.

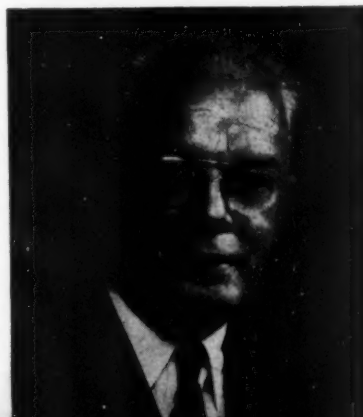
*October 9*—The morning of the first day will be devoted to a summing up of the over-all progress made during the past seventy-five years. Lyle Watts, chief of the U. S. Forest Service, will represent the federal government; Joseph Kaylor, president of the Association of State

Foresters, and director of Forests and Parks for the State of Maryland, will represent the forty-eight states of the nation; D. C. Everest, chairman of the board of the Marathon Corporation, Rothschild, Wisconsin, and recipient of a 1949 American Forestry Conservation Award, will trace

strides made by industry during the past three quarters of a century.

At noon you will walk a block and a half to the campus of the Trees for Tomorrow camp where lunch will be served. Then you will board streamline buses for the first of a series of three field tours. A narrator will ac-

**A. C. Spurr, President of The American Forestry Association**



**Folke Becker, President of Trees for Tomorrow, is meeting chairman**





company each bus.

As you glide along blacktop roads, in the crispness of an autumn afternoon, your narrator will describe the points of interest noted in your tour guide, and identified by large numbers along the roadside. You will pass school forests, fire towers, and travel through the 608,000-acre Nicolet National Forest. You will see thriving young plantations, roadside strips of virgin timber, the Wisconsin school forest workshop, U. S. Forest Service ranger stations, the Wisconsin school children's plantation, planted with funds furnished by grade school children of the state—one penny per pine. There will be two stops this first afternoon. The first will be at the Gagen Experimental Forest, a 2,300-acre tract, set up by the Consolidated Water Power & Paper Company for intensive management. Here the story of how trees grow as a community, and how man can help nature grow more and better trees will unfold.

Your next stop will be at the Timber Harvest Forest, a demonstration area established by the Northern Lakes Forest Research Center. In this tract the annual growth is harvested, with logs, pulpwood and tie cuts neatly piled to dramatize to small woodland owners the economics of harvesting only the annual growth.

You will see whitetail deer browsing at the roadside, blue lakes, with the brilliantly colored shorelines mirrored on their unruffled surfaces.

You will have an opportunity to relax, to become acquainted with your tour members, and then to assemble at 7 p.m. for an old-fashioned Paul Bunyan barbecue in the Eagle River stadium. There will be stunts, a lumberjack program and a community sing.

**October 10**—Highlights of your second day will take you to the Star Lake Plantation, a thirty-seven-year-old man-made forest, through the Northern Highland State Forest, and then to a campsite at Trout Lake for your first in-the-field lunch. Do not be surprised during the lunch hour to see the *Norseman*, a seven-passenger U. S. Forest Service plane from the Superior National Forest, circle overhead and then glide to the sur-

face of the lake, taxi up to the shoreline, and put out a forest fire.

The arrival of the *Norseman* will be your introduction to a demonstration of modern forest fire fighting equipment by the forest protection division of the State Conservation Department. After lunch you will simply walk across the road to a natural amphitheater. A Conservation Department plane, with a two-way radio and loud speaker, will circle the area and keep you informed of the technique used to combat the forests' worst enemy—fire.

Tour members will assemble again, on the evening of the second day, in the Eagle River Grade School, for



#### HOW TO MAKE RESERVATIONS

Simply write Elsa Bloom, secretary, Information Bureau, Eagle River, Wisconsin, indicating your mode of travel and the number in your party. You will receive complete information on a selection of housing accommodations and rates.

Upon your arrival in Eagle River, register at the information booth adjacent to the Chicago and North Western Railway station for assignment to your hotel or resort. If you travel by train, transportation will be provided to and from resorts at all times. All tours will be made by bus only.

the 69th annual American Forestry Association banquet. Your president, A. C. Spurr, will present the AFA Conservation Awards. You will hear an important message from Dr. James P. Adams, provost of the University of Michigan.

**October 11**—Emphasis will be placed on water as a resource at the Rainbow Flowage and Weather Station, a graphic example of how industry stores, uses and budgets the water of the Wisconsin River, the hardest working river in the nation.

Your in-the-field lunch this day will be at the Northeast Area Fishery Headquarters, in a beautiful forest setting.

The afternoon will be given over to a tour of the famous plantations of the National Container Corporation, and to a demonstration of that company's new portable chipper. There'll be plenty of action with four tree-planting machines and a hydraulic loader in action. On your return to Eagle River, you will see the historic logging museum in Rhinelander, the Rhinelander Paper Company, and the Lake States Yeast Corporation plant, where waste sulphite liquor is converted into yeast.

You will arrive back at your modern resort, happy in the experience of the ending of a perfect three-day visit to the wilderness area of northern Wisconsin, where beauty lies in waiting at every turn in the road, and where natural resources are being restored, wisely used and managed to guarantee security for our American way of life for tomorrow.

Provost James P. Adams, who will address the American Forestry Banquet, will speak on "Natural Resources in Human Affairs."

A native of Michigan, Dr. Adams was an instructor in economics at the University of Michigan before going to Brown University in 1921. At one time he was acting president of that institution. He returned to Michigan in 1945 as provost and professor of economics.

Dr. Adams has served as an arbitrator in labor-management disputes, has been interested in Boy Scout activities, and has served on boards of schools and hospitals. As a university administrator, he uses the democratic method. He is

painstaking in negotiations and never tries to force politics or decisions upon the faculties. He has been the chief educational officer at the University of Michigan during its period of growth from the wartime low of about 9000 students to today's enrollment of more than 21,000.

The development of understanding among peoples of the various classes—economic, racial, religious—to the end that there may be unity of purpose in the structure of our democratic national life, in the opinion of Provost Adams, is a responsibility which educational institutions, in cooperation with other agencies, must emphasize.



## CARAVAN PREVIEWS

The 69th Annual Meeting Conservation Caravan will afford members and guests an unequalled opportunity to observe at first hand present-day conservation at work. For example:

Above, seven-year-old Norway pine plantation of the National Container Corporation.

Upper right, Star Lake plantation, one of the oldest hand-planted forests in the nation.

At right, Fish Hatchery at Woodruff, one of three maintained by the state. Lunch will be served here.

Below, mechanization in the woods, making for closer utilization and more intensive forestry. At left, hydraulic skid loader of the Consolidated Water Power & Paper Company can lift a cord of pulpwood at one time. At right, Container Corporation's portable wood chipper used to convert low-grade hardwoods into chips in the woods.

Photos by Trees for Tomorrow, Inc.





# Controlling “

By DR. ARNE E. CARLSON

A SELF-STYLED “nature lover” in a noon luncheon conversation visibly shuddered as we discussed methods of killing unwanted trees. Destruction of any tree, unless necessary for the production of lumber, or to provide space for a construction project, he considered little short of a crime.

Others of us around the table were, I feel sure, as fond of beautiful trees as the fellow who protested. But we were also aware of certain practical aspects of good forestry.

“Why,” we asked him, “do you suppose the government pays hunters to kill certain predatory animals?”

Of course he knew the answer to that—the need to protect deer and small game as well as domestic herds of livestock from these predators. But it opened an entirely new field of thought to him when we compared certain trees to these animal predators, explaining that one large black-jack or post oak in a valuable pine stand can take as much room as fifteen to twenty saplings, eight to ten small poles, or two to four sawlogs.

Indeed, there seems a striking similarity between the understory of scrub hardwood in a pine forest which prevents the development of new pine seedlings, and the predatory animal that raids nests of pheasants, devouring the eggs and preventing the hatching of a future generation.

L. E. Chaiken, silviculturist of the Southeastern Forest Experiment Station, reports this exact condition in a recent study of the encroachment of hardwoods in southern pine stands.

His example is a well-stocked, pure loblolly stand in the Santee Experimental Forest in South Carolina. The pine timber is about fifty years old, with no fire record in fifteen years.

“A tally of the understory,” he writes, “reveals over 5000 hardwood

Nine months after hardwoods were poisoned, loblolly pine reproduction is rapidly recovering



# ng "Forest Predators"

**Here is the story of Ammate, the ammonium sulfamate compound that may help solve the scrub hardwood problem in the pine growing region of the South**

stems per acre; about half are below breast height and the others mainly in the zero to one-inch class. There are also nearly 4000 stems of woody shrubs per acre. Thus, there are about 9000 competitors in the understory. But there are no pine seedlings, other than those that germinate during the current year.

"All overstory pines in the observed stand bear cones. About every other year these trees will produce a good, if not an abundant, supply of seed. Much of the seed is intercepted by the hardwood litter and fails to germinate. Those seedlings that become established are practically all short-lived because of the heavy competition from low hardwoods and shrubs."

There, briefly, is the problem facing those who are looking to the future of the pine industry of the South.

In 1929, the Southern Forest Experiment Station started a series of tests with poisons to kill undesirable hardwoods in pine stands. In this case it was not a matter of brush control. The "game" being sought was the blackjack, post oak, or other "weed tree" whose branches, roots, and the very space it occupies rob pine seedlings of the soil, moisture, fertility and sunlight they require for maturity. In the majority of cases, these trees are not marketable, being gnarled, rough, with hollow heart or other defects.

Cutting out or simply girdling these trees has been a poor answer to the problem. From stump or roots the hardwoods send out sprouts which soon cover more area and crowd pine seedlings worse than do the parent trees.

In the early years of these experiments, such materials as ammonium nitrate, potassium nitrate, sodium nitrate, copper sulfate, zinc chloride, sodium chloride, sodium arsenite, creosote, and diesel oil were tried.

Most effective of these—a real ray of hope in the battle against the "pine



**How Ammate is applied. Above, spray gun applies solution to "frill," a complete ax ring around tree. Right, is the "cup" method, in which crystals are placed in pocket at base of tree**

robbers"—was sodium arsenite. But the hazards of this chemical, which is deadly poison to all animal life, augured against its use.

Meantime, research in the development of growth regulators had been carried on by chemists of the Du Pont

Company. In 1944, they sent samples of a new material to the foresters for trial in combating these scrub hardwoods. It was an ammonium sulfamate compound, soon to be known as "Ammate" weed killer. In quantities required for tree killing, it was free of hazard to humans and animals, and soon won a reputation, in the words of Fred Peevy, forest ecologist of the Southern Forest Experiment Station, as "the most effective and versatile of all tree-poisoning materials." For it could be used either in dry crystalline form or in solution, its defoliation effects were prompt, and its penetration of the root system, when applied in adequate amounts, inhibited sprouting.

Mr. Peevy has been prominent in the testing of "Ammate" and development of practical techniques to use this material. In this work he has been joined by other foresters at the nine branch research stations throughout the pine belt.

Today these specialists in forest management are supplementing their tree poisoning studies with experiments in spraying the brush understory. They're using such materials as "Ammate" weed killer, 2,4-D and 2,4,5-T at various concentrations. And it seems very likely that the ultimate recommendation which timber owners will adopt to protect the future of their pine stands will be a combination of poisoning the larger trees and spraying the brush and shrubs.

The importance of ridding their pine forests of these scrub hardwood pirates has been readily recognized by southern lumbermen, pulp and paper companies and other owners of timberland. Many of these operators have had tree-poisoning crews in the woods for several years now.

The reason for this serious offensive against the hardwood invaders is evident when you glance at figures compiled by forest economists. More

*(Turn to page 43)*



# I Was Bitten By a Bass Bug

How a misguided spouse and  
selfish friends thwarted a  
noble attempt to give the  
fishing world a perfect lure

By HARRY BOTSFORD

**I** REMEMBER when I was first bitten by a bass bug. It's one of those dates a man never forgets, comparable to the first time a girl kissed back, to the time when Uncle Sam told him to climb into uniform and fight the good fight—and to the day he was discharged—or got his first promotion—or became a father.

Being bitten by a bass bug launches a chronic condition that hovers between the extremes of Heaven and

If I reproach her for this shrewish attitude, if I try to soft-talk her into a more reasonable frame of mind, the Lady becomes stuffy. She reminds me of things I should prefer to forget. She can—and does!—document her charges. She often does this in the presence of witnesses, most of whom enjoy the recital much more than does the victim.

It happened, this business of being bitten by a bass bug, on a hot August afternoon fifteen years ago. I had been casting a variety of plugs into the waters of Sugar Lake—completely without luck. I wearily rested and watched another angler using a fly rod. He was getting strikes with regularity, snagging into some healthy fighting bass that caused the slender fly rod to arch sweetly. He was not only netting bass, he was having grand sport—he probably had a full creel, for he was releasing the fish he caught. The only thing I had in my creel was a distinctly reminiscent fishy smell.

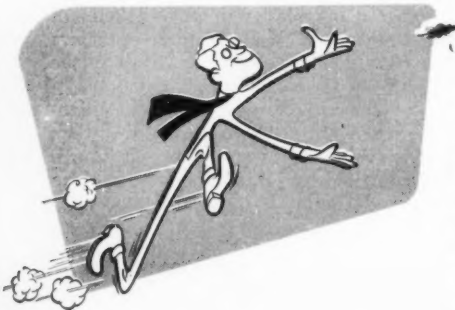
I watched this chap until I saw him put away his tackle. Then I rowed over and started to talk. I discovered that I knew him slightly. He was a bass bug addict and he waxed enthusiastic about his lures, most of which he had compounded himself. His creel was filled with prime bass—the legal limit.

Need I go further? Then and there the bass bug bit me. I've never really recovered. I took down a list

of the things he said I would need to make my own bugs, a rather impressive list. I bought all of them. He came to my house and we sat down at a card table and he tried to teach me the rudiments of tying a bass bug. It looked very simple. It still looks simple when I see the agile fingers of an expert doing the job. Notoriously inept with tools, I was subjected to some good-natured, although cynical, comment from the Lady when I started operations on my own.

The first bass bug I tied required three nights of concentrated effort. It was unique—I'll say that for it—both in coloring and shape. I pricked my fingers in a half-dozen places, wax was dropped on a rug, fragments of feathers and assorted hair had fallen off the table. I needed some red silk thread and I raided my wife's sewing cabinet. I also found on her dressing table, a number of pieces of equipment that I found useful—two pairs of delicate and sharp scissors, a pair of tweezers, some clear finger-nail polish. It was later claimed that I ruined the scissors, lost the tweezers, spilled the polish on the rug.

The bug was unlovely and weird; it appeared to be a cross between a large bumblebee and a smallish canary with freckles. The first time I tried it with a fine fly rod especially made for bass bugs, it seemed to have more wind resistance than a toy bal-



the other place. If I tried to forget it, if I loudly insisted that I was no longer interested in bass bugs, my oratory would be wasted effort. I know a Lady who would doubt me. She has good reason, I'm afraid. Normally a quiet and gullible person, she is not given to caustic remarks, nor is she often a prey to suspicion. But on the subject of bass bugs she is vocal, suspicious, sarcastic and adamant.

loon. When it struck the water it did so with the delicate lightness of a Mars flying boat. I suspect that any self-respecting bass who viewed my offering, practically laughed himself to death. A strong, silent man, I was uncommunicative when I returned home from the lake and refused to reply to the casual inquiry of the Lady as to my luck.

That night I started on a new project. No sooner was the equipment arranged on the card table in the living room than a mandate was issued. Being a peaceful citizen by nature, I moved my gear into the kitchen, where the floor was protected by newspapers.

I had thought that the list of feathers, fur, hair and hackles was an impressive one, but I soon discovered that I needed more. Mine is a venture-some spirit—rules annoy me. I've gone through life veering away from the accepted rules, delving deep into the realm of unorthodoxy. I decided that I would pioneer in the field of bass bugs, that I would invent a few patterns of my own. If I explored the field sufficiently, I felt confident that eventually I would come up with a super bug, one possessed of so much appeal that it would automatically attract the choice bass in any given body of water.

In other words, my modest dream and ambition was to originate a bass bug that would be the answer to the angler's prayer—an infallible lure. Once I found it, I would set up a small manufacturing shop. It would never do to sell such a lure to the mass market, for it would certainly mean the utter extinction of all bass within a matter of months. It was a project that called for careful planning, for clear thinking on a high level. After much travail I arrived at the answer.

I would not sell this marvelous bass bug. I would simply lease it for a

week at a time and each angler would have to be bonded, guaranteeing that he would take no more than the legal limit of bass, that he would not lend or release the lure to another angler. Naturally, the rental price would be a bit stiffish. After all, this would be a device of my own, one that would require some very personal research and experimentation. As the inventor of this boon, certainly I deserved to profit modestly by reason of my enterprise. A daily rental of \$5 seemed moderate. I would make only a thousand of the bugs. That would give me roughly a gross weekly income of \$35,000. The bonding company should also give me a modest commission on each bond, too.

Obviously, I had to create something that was distinctive—a bass bug the like of which had never been made before. This, strangely enough, I managed to accomplish.

The formula and pattern as I viewed it, required a radical departure from the orthodox. All of which inevitably led me into the shoals and deep waters of trouble of assorted nature. To this day, Mrs. Maxweldon sniffs audibly when she passes me on the street. There was a time when it was her firm intention to sue me for damages that were entirely beyond reason. There was a time when Mrs. Maxweldon and the Lady were fast friends, bosom companions. Today when they meet, they bow frigidly.

It happened this way: Mrs. Maxweldon came to our house one evening, bringing with her an especially obnoxious, ill-tempered Pomeranian who gloried in the name of Princess Arthacia. I like most dogs, but the princess was a canine I loathed. Her temper was vicious, she was perfumed and she wore a ribbon of pale mauve around her blasted neck. On this evening, she was especially prettied up. The following day she was to be entered in the Wanango Dog Show and it was said to be a cinch that she would walk off with the blue ribbon.

I was working on my masterpiece in the kitchen, a sort of social pariah, when the princess minced into my presence. She had nipped me on the ankle on a previous occasion and I suspected that it was her intention to renew the feud. But as I gazed on her silky coat, the fragile, delicately colored hair on her tiny ears, I had an idea. I tried, s'help me I did, to dismiss it as a mad dream. But as I turned the idea over in my mind, it became an obsession. A few strands of that silky hair tied into a

bass bug would give it rare distinction and character.

I explored the icebox, found some Roquefort cheese, a delicacy I knew the princess adored. I offered it to her and she accepted daintily, making



no objection as I snipped off a liberal amount of the hair from one ear. I whistled cheerfully as I tied some of it into place, shouted a cheerful farewell to Maxweldon as she departed. A slight twinge of conscience caused me to hide the partially completed bug when the Lady came out to say good-night and to tell me how happy Caroline was over the thought that the princess was sure to win on the morrow.

Next day, at my office, I was suddenly exposed to calamity in its most violent form. The Lady telephoned and her voice was a trifle frantic. She had just been talking to an hysterical Mrs. Maxweldon. The princess had been barred from the dog show because of the fact that one ear had been virtually denuded of hair. This was far from the truth, but I let it pass. All I had taken was a single lock. Then Mrs. Maxweldon phoned me. Her conversation was far from conservative. She referred to me as a vandal, a despoiler, a vicious and evil individual. She spoke of balm in the form of more money than I have ever earned. She promised my arrest on sundry charges as an event imminent in the near future.

Curiously, I was not hungry that night. I ate sparingly, resolutely refused to admit my guilt until the Lady confronted me with my partially completed masterpiece and pointed to the Pomeranian hair incorporated therein. I retreated to the kitchen, fortifying myself with the thought that every great inventor has had certain crosses to bear. I set to work again. The bug seemed to have great virtue in my eyes. But it was far from com-

(Turn to page 34)







## LEWISTON, IDAHO

Few cities appear as often in the history of the great Pacific Northwest. It was here, where the Snake and Clearwater rivers unite, that the Lewis and Clark Expedition paused on its way westward. A few miles up river on the Clearwater is the site of Idaho's first sawmill. It was established by the Reverend Henry Spalding, a colorful, important figure in the chronicle of early day missionary work. The Nez Perce Indian Reservation is nearby. It is home to the tribe whose famous Chief Joseph, warrior strategist of highly respected abilities, waged bitter warfare against pioneering whites.

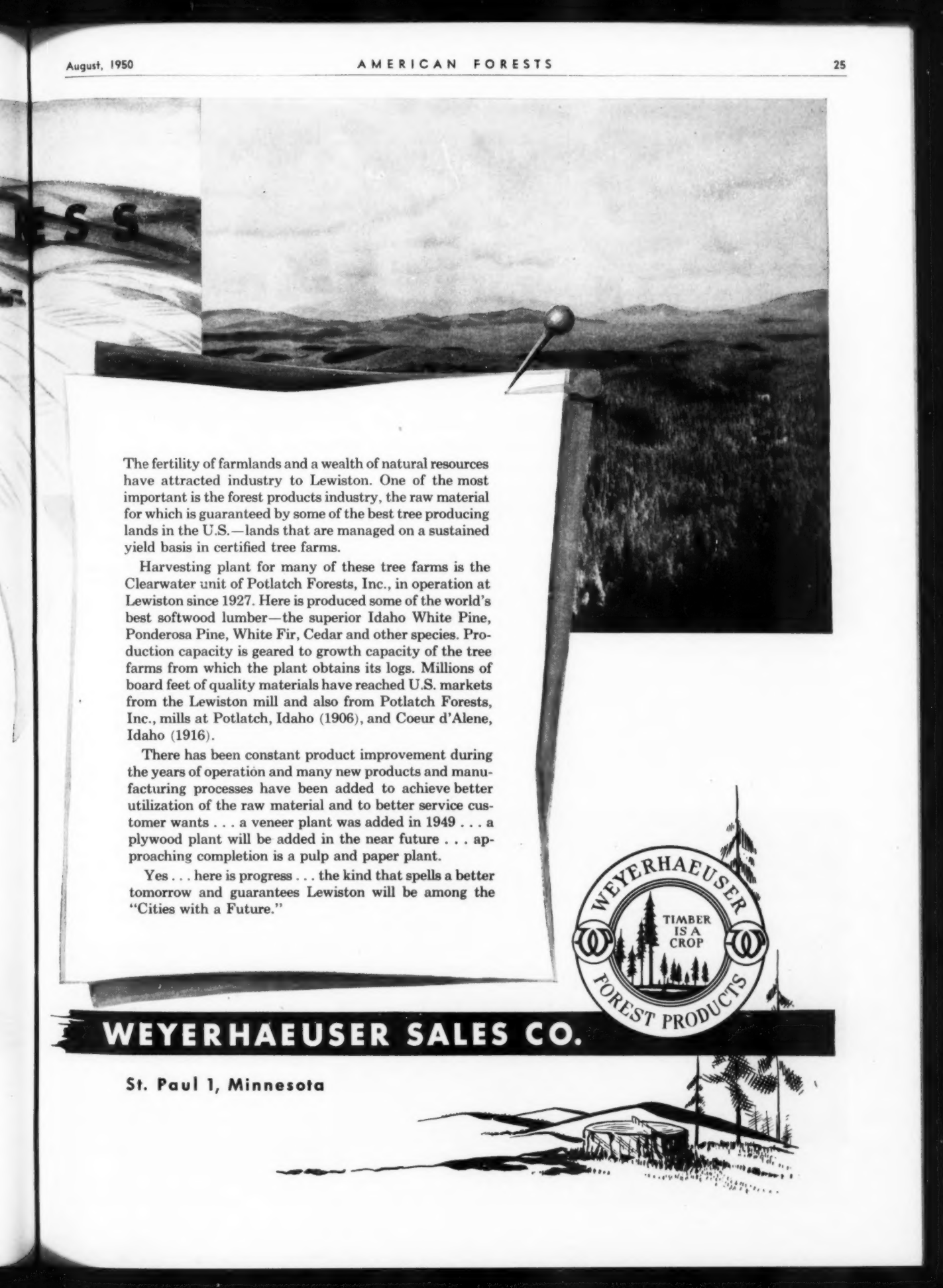
Lewiston was the capitol city for the vast Idaho territory and years later became the first capitol of the State of Idaho. As early as 1861 it was the entrance way to the gold of the Bitterroot Mountains, and great mineral deposits, as yet undeveloped, will someday find their way to market through this gateway city.

A long 8-mile spiral highway brings the visitor from a high plateau of rich farmland down into the Lewiston Valley and provides a panoramic view seldom equalled. Other scenic wonders are within a few miles of the city . . . among them

Hell's Canyon, the deepest gorge in America, through which the waters of the Snake thresh their way northward to union with the Clearwater and Columbia.

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Guided tours. . . 9:30 a.m. and 1:30 p.m.



The fertility of farmlands and a wealth of natural resources have attracted industry to Lewiston. One of the most important is the forest products industry, the raw material for which is guaranteed by some of the best tree producing lands in the U.S.—lands that are managed on a sustained yield basis in certified tree farms.

Harvesting plant for many of these tree farms is the Clearwater unit of Potlatch Forests, Inc., in operation at Lewiston since 1927. Here is produced some of the world's best softwood lumber—the superior Idaho White Pine, Ponderosa Pine, White Fir, Cedar and other species. Production capacity is geared to growth capacity of the tree farms from which the plant obtains its logs. Millions of board feet of quality materials have reached U.S. markets from the Lewiston mill and also from Potlatch Forests, Inc., mills at Potlatch, Idaho (1906), and Coeur d'Alene, Idaho (1916).

There has been constant product improvement during the years of operation and many new products and manufacturing processes have been added to achieve better utilization of the raw material and to better service customer wants . . . a veneer plant was added in 1949 . . . a plywood plant will be added in the near future . . . approaching completion is a pulp and paper plant.

Yes . . . here is progress . . . the kind that spells a better tomorrow and guarantees Lewiston will be among the "Cities with a Future."



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# Rabies

## IN THE WILD

Since 1916, rabid foxes, coyotes and other denizens of forest and field have given Uncle Sam quite a headache. Here is how he keeps this ever-present menace in check

By STANLEY P. YOUNG

NO one knows when rabies first appeared among wild animals on this continent. The first white men to contact the plains Indians found they were aware of rabies as carried by wolves and coyotes—in fact, they had a crude treatment for members of their tribes contacting it. Elsewhere throughout the West early beaver trappers, mountain men and soldiers came in contact with rabies as spread by wolves, coyotes, and skunks. During their historic journey into the Northwest, Lewis and Clark had considerable trouble with rabid coyotes on the upper Missouri.

In colonial America, the first outbreak of which there is record was in the North Atlantic States — among foxes in Massachusetts in 1812. Rabies was apparent in foxes in Alabama in 1890 and was sporadic among these animals in most southern states until the serious outbreak beginning in Georgia in 1939. Louisiana, Mississippi and Arkansas experienced serious outbreaks during 1944, when in twelve counties and parishes more than 400 domestic animals, valued at \$28,000, were bitten

and died. More recently, New York and the New England States have been troubled with rabid foxes—as has Ohio.

In the order of their importance, wild animals susceptible to rabies are: feral dogs, coyotes, foxes, wolves, skunks, bobcats, badgers, pumas or mountain lions and martins. In these animals rabies occurs in two recognized forms—furious or excited and silent or paralytic.

It was an outbreak mainly among dogs and coyotes in the Northwest that gave real impetus to cooperative injurious animal control by the federal government beginning in 1915. Intolerable wolf depredations on national forests and contiguous public lands finally led to the initiation of this program, but the rabies outbreak which by 1916 had spread over sections of Idaho, Nevada, Utah and California played an important part in that the initial emergency appropriation of \$75,000 for the program was increased by \$125,000 for control work in these states.

This early work was carried on by the Biological Survey, later merged with the Fish and Wildlife Service, the federal agency responsible for injurious wild animal control and suppression of diseases today.

Since the serious trouble among coyotes in the Northwest during 1915 and 1916, sporadic outbreaks have occurred among these predators on the western ranges each succeeding year up to the present time. A serious situation developed in the Gardiner area of southern Colorado during (Turn to page 30)



Control measures during an outbreak call for removal of wild animal life in infected zone before danger to man and domestic stock becomes critical



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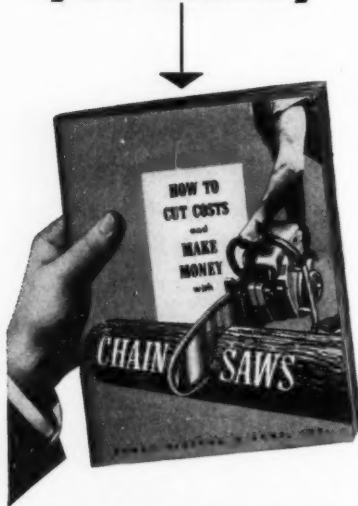


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## NEWS IN REVIEW

The Senate Committee on Agriculture and Forestry on June 30 reported favorably, with one amendment, H.R. 7155, the Sikes bill to expand the federal-state program of forest management assistance to all private landowners and to provide technical aid to processors of primary forest products. At present, such assistance is available to farmers only.

The amendment provides that the provisions of the act "shall be carried out in such a manner as to encourage the utilization of private agencies and individuals furnishing services of the type described. . . ."

Lowell Besley has been named by the University of British Columbia as dean of its newly formed Faculty of Forestry. He has served as professor and head of the Department of Forestry since July 1943. Mr. Besley formerly was professor of forest management at the University of West Virginia.

The pulpwood industry, through the Southern Pulpwood Conservation Association, for the fifth consecutive year is providing camps where the care and wise use of forest trees will be taught to approximately 750 farm boys from nine southern states.

The state forestry department in each state administers the camps and arranges for the staff to teach forestry subjects. Boys selected to attend must earn that privilege by performing outstanding work during their school year on forestry projects either on their own woodlots or in their school activities.

The boys learn a few of the fundamentals of good forest practices which they can apply to the management of their woodlands. Perhaps of most immediate value to them is their association with public and privately employed foresters, to whom they can turn for assistance in the more complicated problems involved in forest management and utilization of forest products. In addition, they learn the association of the forest with their everyday lives and the important bearing it has on their economic and cultural future.

Suggestions offered by various conservation groups have resulted in a redraft of S. 3409 to establish the Wyoming Jackson Hole National

Park. Wyoming senators O'Mahoney and Hunt, who introduced the bill, have agreed to a change in name to the Grand Teton National Park which would include all of the present Grand Teton park and most of the lands embraced in the Jackson Hole National Monument, including nearly all of the Rockefeller holdings in the area.

Certain portions of the old monument are made a part of the National Elk Refuge and a small portion is transferred to the Forest Service.

The matter of tax revenue loss to the county has been changed also. For the first year of operation of the new park the county will receive from the federal government the full amount of taxes that would be paid by owners of property within the area. Each year for twenty years the county will receive five percent less.

There was some fear that the language of the original bill covered the elk herd wherever it might be in the Jackson Hole country. This has been straightened out by limiting the joint control feature—that is, between government and state—to the elk which are within the borders of the new park.

It is believed that the new version of the bill is satisfactory to most of the conflicting interests. And it has the approval in its new form of the Secretary of the Interior. The bill is now before the Senate Committee on Interior and Insular Affairs.

International Paper Company's \$20,000,000 plant in Natchez, Mississippi, has been completed. It will use a new method in processing hardwood for manufacture into rayon pulp.

When in full operation the mill will employ between 800 and 1,000 persons on an annual payroll of about \$2,500,000.

A move to mobilize the logging industries near Portland, Oregon, to combat forest fires this summer was started recently by W. D. Hagenstein, chief forester for the Forest Conservation Committee of the Pacific Northwest Forest Industries.

Mr. Hagenstein outlined a four-point action program for each logging unit: (1) prepare a fire-fighting plan for each camp; (2) assign each logger a specific job to be handled

in case of fire; (3) keep an ample supply of fire-fighting tools and see that everyone knows their location; (4) have fire drills to accustom men to speed.

Missouri's commercial forest land could support five times its present volume of sawtimber and provide additional income for landowners and forest industries and more jobs for Missouri workers, according to a report just released by the Central States Forest Experiment Station at Columbus, Ohio, in cooperation with the University of Missouri Agricultural Experiment Station.

The report reveals that more than one third of all land in Missouri, or fifteen million acres, is commercial forest land. This land now supports approximately twelve billion board feet of sawtimber, or an average of 789 board feet an acre. Under good management, timber stands on this same forest area could be increased to fifty or sixty billion board feet.

## Letters

(From page 4)

park estate, and of the Fish and Wildlife Service to operate the game refuges. Their major attention should be centered on these functions, rather than be diluted by spreading out into service functions which, in time, are used for the aggrandizement of each bureau.

The Department of Agriculture is already much too large and unwieldy. To manage nature resources alone is itself a huge undertaking, quite large enough and important enough to justify a separate and new department of cabinet status. It may appear to some that unification is defeated by setting up a new department. Actually it would provide for more logical management and administration and greater all-around economy to more than offset the cost of a new secretary's office.

The very fact that property—land and resources—is involved, and that income is derived from its management makes the management of public natural resources altogether different from the major functions of existing departments. A separate department of natural resources, preferred by the Task Force and by the minority of the Commission, should not be passed off lightly. It does not nullify the basic Hoover principles. It would enhance their effectuation.

Emanuel Fritz

Berkeley, California.

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## Rabies in the Wild

(From page 26)

ing the winter of 1923. Apparently the disease was introduced on the San Isabelle National Forest by a rabid dog. The case was not reported for several months and, as a consequence, a large number of cattle and other domestic animals were bitten and died.

Responding to this emergency, the Biological Survey assigned men to conduct a vigorous control campaign. As a result, the range was thoroughly freed from coyotes and bobcats and the disease brought under control. Later, however, rabies made its appearance among dogs and coyotes on the eastern edge of the San Luis Valley, and spread rapidly. Evidence indicated that it had been brought in from the Gardiner area by rabid animals which had crossed the Sangre de Christo divide.

Shortly after its appearance citizens formed the San Luis Valley Anti-Rabies Association and, on its representation, the commissioners of six counties promptly appropriated county funds to cooperate with state and federal governments. A thorough field campaign was soon under way

to wipe out coyotes and worthless dogs and, by the end of 1923, rabies disappeared in the area.

Field experiments by the Biological Survey and its successor, the Fish and Wildlife Service, constantly devoted to the improvement of predator control technique, has to date resulted in more selectivity whenever the elimination of locally injurious wild animals becomes necessary. Furthermore, these experiments are making possible more humane control practices.

Cooperative rabies control work of the Fish and Wildlife Service has prevailed against foxes—both red and gray—in the southern states for the better part of the past decade. This program, like other rabies control campaigns, involves the method whereby the reduction of wild animal life, particularly the carnivores, in known infected areas is sought before danger to man and domestic animals becomes too great.

Rabies in foxes was reported in Burke County, Georgia, in 1939. Since then it has spread to at least half of the 159 counties in the state—



U. S. Fish and Wildlife Service

The coyote is one of the chief carriers and spreaders of rabies

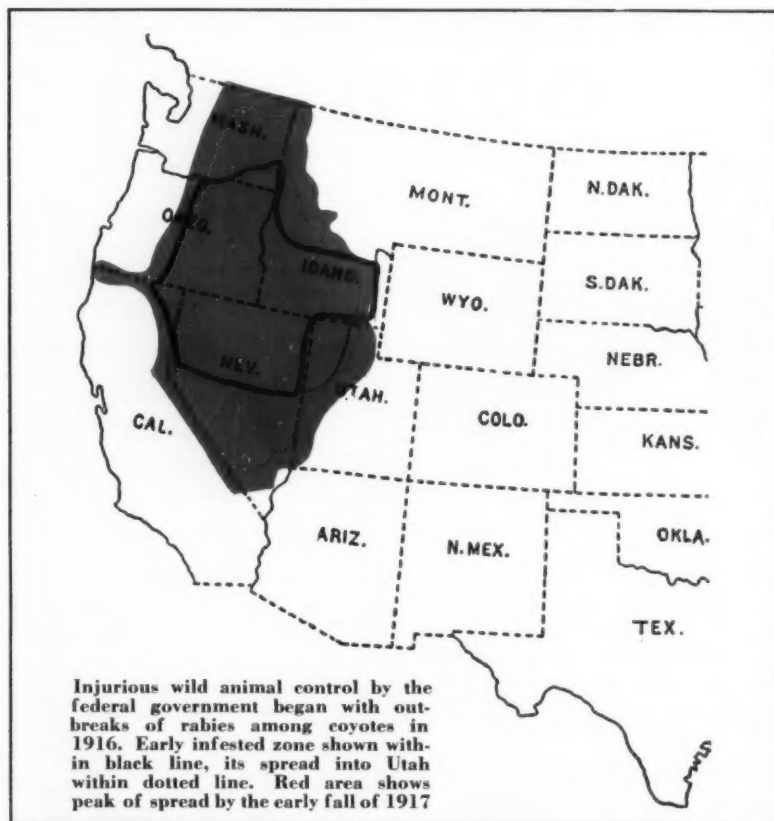
and into Alabama, Mississippi, Louisiana, Arkansas, Kentucky and Florida.

When an outbreak starts in a locality almost anything can happen. Foxes chase dogs and attack people. They may be found anywhere, in a farmyard or in the center of a town. One was killed in a court house.

Since rabies outbreaks appear to strike in areas of heavy fox population, control or suppression work has, with few exceptions, been confined to reducing fox numbers in the areas where the disease is present in serious form. Lack of interest, and quite often active opposition to destroying foxes, has made presuppression impractical in all but a few cases. Because of the controversial issues involved in the matter of fox control, the Fish and Wildlife Service follows a policy of undertaking actual fox reduction work only in counties where responsible officials sign a cooperative agreement which, among other things, sanctions the work. It has carried on control work in perhaps half of the counties in Georgia in which outbreaks have occurred.

When presuppression, which means the reduction of fox populations in localities where rabies has not yet appeared, is deemed necessary, the Service has recommended that state game departments ease up on restrictions that protect foxes. It has advocated that fox populations be reduced when found to be abnormally high, particularly if rabies is known to be prevalent in either dogs or foxes in the region. It has not advocated posi-

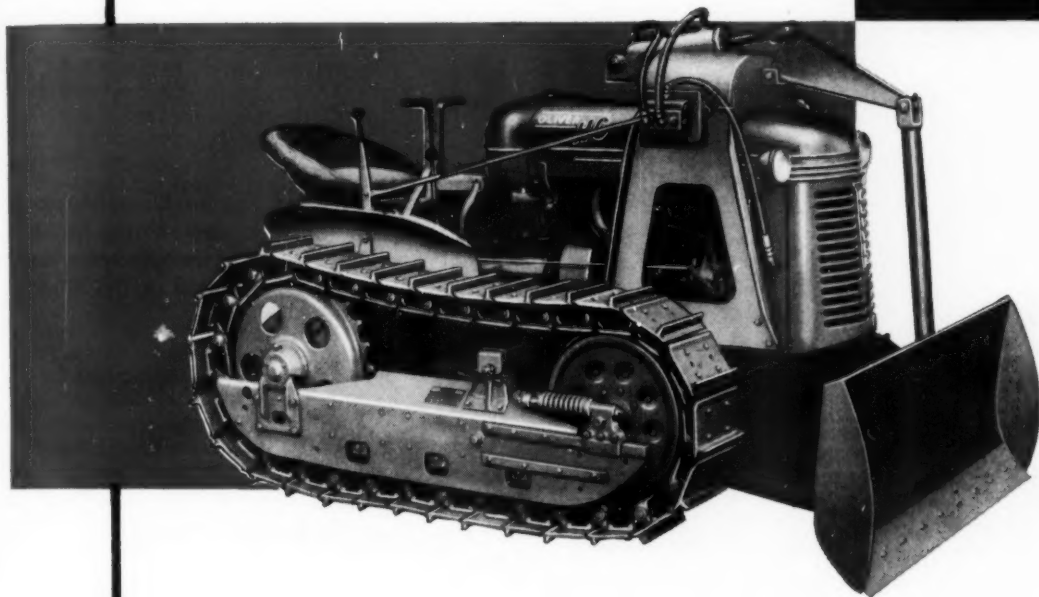
(Turn to page 42)



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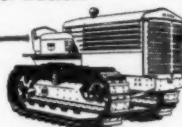
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# Little Smokey Goes to Washington

Rescued from a forest fire in New Mexico, this fuzzy bear cub is now living in the National Zoological Park. People who see him are reminded to be careful in the woods

By DOROTHY GRAY GUCK

**L**ITTLE SMOKEY, the three-month-old black bear cub that became a national celebrity when a forest fire burned him out of his forest home in the Lincoln National Forest of New Mexico, has taken up residence in the nation's capital.

Named for Smokey, the fire preventing bear state and federal foresters have made famous in their poster advertising campaign to keep fires from devastating valuable forest lands, the cub is now housed in the National Zoological Park at Washington, D. C. Fully recovered from burns suffered earlier this summer, Little Smokey had been living in New Mexico at the Albuquerque zoo. But the public took the little cub to its heart and flocked in such great numbers to see him that the U. S. Forest Service decided to bring the youngster to Washington to be viewed by even greater numbers. He made the trip in private plane furnished by the Piper Aircraft Corporation, and on June 30 was presented to the Wash-

ington zoo in an appropriate ceremony.

Eleven-year-old Stanlee Ann Miller of Albuquerque, granddaughter of Senator Dennis Chavez of New Mexico, made the actual presentation, and a Washington youngster, Spicer Conant, accepted the cub in behalf of the children of the nation's capital.

Little Smokey's introduction to mankind came in his darkest hour.

The pads of his feet had been burned to the bone from a forest fire which had been raging for five days on the north side of the Capitan Mountains in the Lincoln National Forest. A pair of New Mexico Game and Fish Department wardens found him in the smoking ruins and took him into the camp where fire fighters had paused to plan a new line of attack against the unchecked blaze.

Little Smokey was found in this charred and smoking area of the Lincoln National Forest ➔





"Hey fellows, look what we found up in the smoke," one of the wardens hollered. He held the scrubby black bear cub in his arms. The men's tired eyes slowly turned to look at the pitiful little fellow. The hint of a grin pulled up the corners of mouths. Eyes kindled with interest. A hand reached out to pet the cub.

"Why he ain't no bigger than a five-week pup," one remarked. Another went to the first-aid truck and returned with salve for the burned feet. A bottle and nipple were procured and the cook came forth with warm water and milk. Eagerly the men took turns handling and playing with the bear.

"We found the cub on the edge of the burn last night," the game warden told them. "We thought the mother would return during the night to claim her young, so we left him untouched. This morning the little fellow was in the same place. There wasn't a bear track to be seen, so we figured the mother must have been burned or had lost the scent of her cub. Thought we better bring him in."

"The Forest Service has a real live Smokey now," smiled Dean Earl, forest ranger in charge of the fire.

While the cub was carefully moved to a box, the enlivened crew prepared to make a new attack on the fire. A spirit of hope seemed to urge them into renewed activity, as though the poster Smokey might have stepped from his picture and said, "Come on, fellows, you can save my home!"

In the next twenty-four hours the conflagration was conquered. Seventeen thousand acres of salable timber were destroyed—but many miles of rugged wildlife haven were saved.

New Mexico's Little Smokey had saved the morale of a discouraged fire-fighting crew. As visitors to the Washington zoo visit him, his story will be told over and over to warn the people in the poster Smokey's words, "Only YOU can prevent forest fires."

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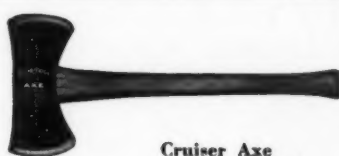
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## Bass Bug

(From page 23)

plete. It needed, among other things, something exotic in the way of colorful feathers.

My stock didn't contain what I needed. I knew what I wanted; a certain pale and delicate green touch. After the Lady had retired I acted swiftly and with resolution. Her Easter hat, a confection both costly and decorative, included among other things a modest spray of pale green feathers, just what I needed. I snipped off just a modest trifle of the feathers, carefully put the hat back in the closet. Sure enough, the feathers gave the bass bug a cocky, devil-may-care appearance that delighted me. However, forboding depressed me so I prudently slipped the bug in my wallet before retiring; unhappily, the Lady was still awake. She spoke bitterly of seven separate telephone calls received that day from Mrs. Maxwelldon. Eventually, I slept.

The Lady called me at the office the next morning and she sounded worried. Did I know the name of a good exterminator? The house was simply over-run with moths, she explained. One of the feathers of her new hat, a Helen Gordon creation she explained, was almost destroyed. All of our woollens and such were in danger and were being sent to the cleaners. That night when I went home, the house smelled to high heaven of strange and acrid disinfectants. The exterminator had charged \$42.50, I was told. The cleaning bills would be still more. But thank heavens, the scourge had been nipped before it became an epidemic, the Lady said smugly. Suddenly I realized that the initial cost of my super-bass-bug was going to be rather high. Well, with an income of \$35,000 a week, I could look back on these misadventures and laugh heartily over them.

I read until the Lady went to bed.

Then I took the bug from my wallet. It was a beautiful affair. I was proud of my handicraft, the balance, the neatness of the work I had done, the harmony of color involved. But, as I gazed on it, I knew something vital was missing, the one touch that would make it a truly great bass bug. The delicate flush of red, that was it. Not a hussy scarlet, not a forthright red, but something pale pinkish, about the color of a rosebud covered with dew. Given that, I'd have something.

I dropped in at Nicky's the next day after work for a cocktail. Nicky has an unusual establishment; a deluxe restaurant and a lordly bar. He owns several mynah birds, one of which allegedly talks—all birds by which he sets great store, especially Renee, the one he claims can talk. Previously I had regarded these creatures with no degree of approval. They were noisy—but their feathers were precisely the pale rose color I needed. I took my third cocktail over to the cage of one of the birds and carried on a one-way conversation with the inmate. I asked politely if he would not care to make a small but vital contribution to a great cause which would bring unbounded joy to the heart of millions of people. He showed no enthusiasm but he didn't raise his unlovely voice in protest when I clipped off a pair of tail feathers.

I was pleasantly engaged in putting the finishing touches to the super-bass-bug that night when the phone rang.

"It's Nicky," the Lady said. My heart sank a little but I determined to be bold, to brazen it out. Nicky is Latin, with all the faults and few of the virtues of the race. He is given to rages. He becomes the victim of anger at the slightest excuse and his

(Turn to page 42)



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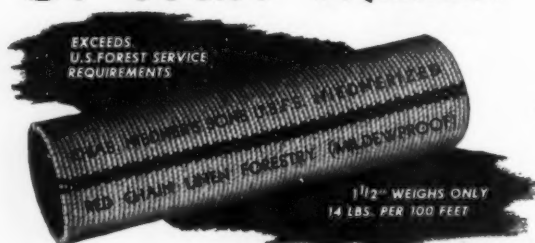
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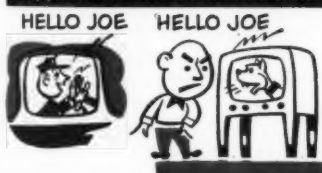
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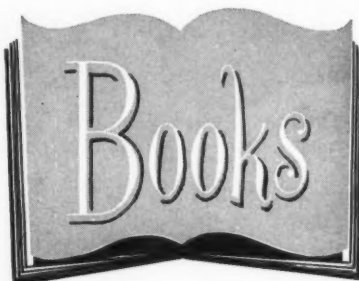
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A SAND COUNTY ALMANAC AND SKETCHES HERE AND THERE, by Aldo Leopold. Published by the Oxford University Press, New York. 226 pages, illus. Price \$3.50.

Prepared and accepted for publication before the author's tragic and untimely death on April 21, 1949, this unusual book is in three parts—(1) a month by month record of close observation of wildlife and its ways and the author's reactions, made on the Leopold farm near Madison, Wisconsin; (2) fifteen nature or wildlife essays, with locales

as widely apart as Wisconsin, Arizona, New Mexico, Manitoba, Mexico, and the Argentine, covering his penetrating observations and reactions over a period of forty years; (3) four articles or essays of dissenting statements of Leopold's philosophy on wildlife, the wilderness, the land and conservation.

This charmingly written book is packed with thought-provoking observations covering the wide field of man's relations with nature, the wilderness and natural resources. Leopold was a pioneer along many lines. As far back as 1910, he was experimenting with practical soil erosion control in Arizona; he organized a series of game protective associations in the Southwest; he made extensive game and wildlife surveys; he wrote the first widely accepted book on wildlife management; he was the first to head a department of wildlife and game management in an American university; he was the first advocate of wilderness areas; he served on numberless policy-making committees relating to forestry, wildlife, game, ecology, the wilderness and conservation. He was the recipient of many honors. He has been called one of the world's great naturalists; his writings have been called prose nature poems. I predict that his last book will eventually become an American nature classic, ranking along with Thoreau's *Walden*.

John D. Guthrie

THE SAGA OF THE WATERFOWL, by Martin Bovey. Published by the Wildlife Management Institute, Washington, D. C. 141 pages, illus. Price \$5.

Here is another book by Martin Bovey, nationally known author and lecturer, with quick-moving, easy-to-read text and splendid photographs. In it he traces the unfortunate changes that took place to transform a hunter's paradise into a hunter's despair. From what were thought to be inexhaustible riches, we see how America's natural resources were abused and squandered unmercifully; how its breeding grounds were ill-prepared for the rainless thirties; how ruthless killing by many people nearly ended the sport of waterfowling. It picks up the thread of the conservation movement which was born of necessity and turned out to be the salvation of America's land and wildlife.

As other similar books on this subject, this is a plea to the fathers who enjoy hunting today to preserve a part of the paradise for their sons.

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## Fires Up, Burned Area Down

The number of forest fires in the United States increased approximately eleven percent during 1949, but the total acreage burned was less than that swept by fire in 1948, the U. S. Forest Service reports.

A summary of annual reports from state and federal agencies participating in forest protection reveals that 193,774 fires burned 15,397,419 acres during the calendar year of 1949. During the previous year, 174,189 fires burned 16,556,780 acres.

Even with the slight increase in number of fires for 1949, the fire record continues to be well below the average of 210,000 forest fires occurring each year before the war. Cooperation of the public is credited for this improved condition.

The Forest Service pointed out that 12,760,118 acres, or eighty-three percent, of the total area burned during 1949 was on unprotected forest land where neither state nor federal agencies maintain fire detection and suppression crews. Less than one half of one percent of the total forest area under state and federal protection was burned whereas better than fifteen percent of the unprotected area was swept by fire.

"When eight out of ten acres of burned forest land are in unprotected areas," said Lyle F. Watts, Forest Service chief, "it is obvious that responsible protection agencies need to extend their systems of fire control."

The chief forester stated that addi-

tional protection is needed, especially in the southeastern states. Nearly twelve million acres of unprotected forest were burned over in the Southeast during 1949.

Dry spells in many parts of the country last year were conducive to forest fires. Severe lightning storms in the West increased fire hazards there. Yet, in spite of these adverse conditions, most forest fires on protected land were suppressed before they had spread very far.

Forest fires caused by lightning on protected areas increased from 4,392 in 1948 to 8,235 in 1949. Nearly all lightning fires were in the West.

Smokers started 17,447 forest fires in 1949 as compared with 14,988 in 1948, and campers started 4,165 fires as compared with 3,064 in the previous year. The Forest Service believes this was due, not to increased carelessness of smokers and campers, but to tinder-dry conditions in some localities and to the tremendous increase in number of people using forest areas.

Forest fires that started from debris burning on protected areas increased from 11,101 in 1948 to 16,466 in 1949. The major number of fires resulting from debris burning were located in southern states.

Incendiary fires—those deliberately or maliciously set—increased considerably. There were 20,047 forest fires of incendiary origin in 1948 as compared with 26,726 in 1949.

## Dinosaur Decision Favors Dams

Secretary of the Interior Oscar L. Chapman has decided in favor of the proposal of the Bureau of Reclamation to build two big dams in Dinosaur National Monument, Utah and Colorado. Announcement of the Secretary's decision was made public in a release dated June 27, issued by the Department of the Interior.

The release emphasizes the need for water, and for reservoirs having the minimum of surface evaporation. Quoting from a letter by Secretary Chapman to Senator Elbert D. Thomas of Utah, the release states:

"Without intending by this action to establish a precedent for tampering with the inviolability of our national parks and monuments, I have approved the plan calling upon the Bureau of Reclamation to draft necessary recommendations to the Congress for the building of Echo Park and Split Mountain dams. I have at the same time asked the National

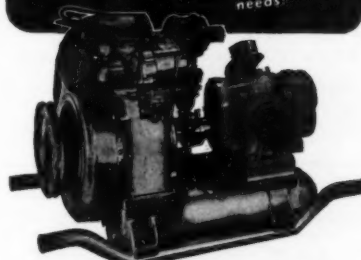
Park Service to cooperate with its sister agency in working out the most feasible ways to insure appropriate recreational use under the circumstances of the Dinosaur National Monument."

Commenting on the Secretary's decision, Devereux Butcher, Secretary of the National Parks Association, said, "To wilderness preservationists and to all who value our great system of national parks and monuments, this is a severe disappointment; the more so since there are adequate alternate plans for dams in the region.

"The struggle to preserve the magnificent wild canyons of Dinosaur, and to uphold the integrity of the national park and monument system, will now move to Congress, where representatives who are friends of the parks and of wilderness will work to defend this priceless and irreplaceable heritage."

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*What's New in Fishing Tackle Made from DuPont Nylon Monofilament*—contains chapters on how to tie knots and a 10-page section describing the use of nylon leader material for all types of salt water fishing. It's a revised and improved edition of *Knots and How to Tie Them with DuPont Nylon Leader Material*, a booklet which was extremely popular last summer.

*This Land of Ours*—a 32-page pamphlet with black and white photos graphically reminding city-dwellers of the importance of soil and water conservation to their daily lives. Public Affairs Committee, Inc., 22 East 38th Street, New York 16, New York.

*Travel Routes Around the World*—1950 edition of the traveler's directory of passenger-carrying freighters, liners, and airplanes. Harian Publications, Greenlawn, New York.

*Improvement of Pine Timber Stands and Brush Control in Right of Ways*—two pamphlets describing the uses and effectiveness of the chemical, "Ammate," in eliminating undesirable hardwoods and killing weeds. E. I. Du Pont de Nemours & Company, Wilmington 98, Delaware.

*Don't Let This Happen in Your Community*—folder stressing the destructiveness of fires and the ability of "Fire-Dog," a fire-fighting unit, to deal with them. Burmont, Inc., Burlington, Vermont.

*Figures of Fashion in American Walnut*—a bi-monthly portfolio of photographed ideas for designers,

architects, and all craftsmen in the woodworking industries. The American Walnut Manufacturers Association, 666 Lake Shore Drive, Chicago 11, Illinois.

*Southern Glo*—a folder on Southern Glo timber marking paint which is produced in the paste or ready mixed type. Also comes in different colors. The Southern Coatings and Chemical Company, Sumter, South Carolina.

*Facts About Lodgepole Pine*—a four-page illustrated folder with factual information on lodgepole pine. Copies available through Western Pine Association at 510 Yeon Building, Portland, Oregon.

*Keep Green Cartoon Booklet*—a 48-page shirt-pocket-size booklet done in cartoon style on the Keep Green theme. American Forest Products Industries, Inc., 1319 Eighteenth Street, N.W., Washington, D. C.

*Volume Tables for Red Alder*—forest research notes No. 55. Designed to aid hardwood loggers and mill men. Copies available from Pacific Northwest Forest & Range Experiment Station, U. S. Court House, Portland, Oregon.

*Where to Buy*—a new membership directory with detailed information on sawmills, remanufacturing plants, timber fabricators, a wood pipe and tank manufacturer, and wood treating plants in the Douglasfir region of Washington, Oregon and northern California. West Coast Lumbermen's Association, 1410 S.W. Morrison Street, Portland 5, Oregon.

*For a Real Lift*—a four-page brochure on Roebbling all-purpose sling with tapered sleeve splice for safety and economy in sling-lift operations. Specifications of dimensions and breaking strengths are shown. John A. Roebbling's Sons Company, attention Wm. Hobbs, Jr., Trenton 2, New Jersey.



## Scout Jamboree

(From page 13)

supreme importance in agriculture and it is in his behalf that I make my appeal," Wheeler McMillen, chairman of the rural committee, commented. "A sound agriculture calls for many things but foremost among them must be listed sound men. The other kind seldom make successful farmers or successful citizens . . . that is why there cannot be a surplus of scout-trained citizens."

Rural scouting is where scoutdom's great effort must be made, leaders agree. Although half a million boys have been reached so far, this number represents only a portion of the 3,400,000 rural boys of scout age in the United States—boys whose fathers own woodlots that all too often need attention and eroded fields that require corrective measures.

Boy Scout leaders hope to reach more and more of these boys by building and training volunteer organizations in each Scout Council and district. Visual aids, personal contact work and reams of literature are flooding out over the country to reach not only these hoped-for leaders but the boys themselves. But scouting will require lots of help to put this program across.

Director Bakken and other leaders in New York headquarters are well aware—and appreciative—of the aid and support foresters, sportsmen and other conservationists have given the scout movement. For example, a survey several years ago showed that 1,094 foresters with the U. S. Forest Service work with Boy Scout groups, 415 of which are officers in local scout councils. Industrial and consulting foresters and representatives of state forest services also contribute to the scout program, although exact figures on this aid are unavailable.

But more help is needed and scout leaders are not being hesitant in asking for it. As Mr. Bakken comments, "These boys are on conservation's team and they deserve the help of all conservationists." That is why experts—men with scientific knowledge of forestry, bird and animal life, soil conservation and similar subjects—are needed in greater numbers as more and more boys enroll in scouting and as greater emphasis is placed on conservation in the scout program.

As a graphic demonstration of this, Oregon troops arriving at the Jamboree displayed insignia bearing the slogan "Keep America Green."

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**Neoxyn-Rorer for Poison Ivy Treatment**—a new lotion which arrests itching and other discomfort of poison ivy, poison oak or poison sumac within a very few minutes. Skin surface heals rapidly. **William H. Rorer, Inc.**, Drexel Bldg., 5th and Chestnut Streets, Philadelphia 6, Pennsylvania.

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**Paddock's Sureclor for Pure and Safe Drinking Water**—a water-energized chlorinator which uses ordinary household bleach for its source of chlorine. Also a "complete packaged water system" for camps or lodges which has been named **Tri-Sure**, combining Sureclor purifier with pumping, filtering and pressure-storage equipment. **Paddock Sales of Texas**, 3727 Atwell Street, Dallas 9, Texas.

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**Wood Study Kit**—neatly packed in a small wood box, contains 54 specimens of important commercial species of wood and wood products used in the United States. To make wood identification and general knowledge of wood both entertaining and instructive, a knife, a 10-power hand lens and an 84-page illustrated manual are included. **Timber Engineering Company**, 1319 Eighteenth Street, N.W., Washington 6, D.C.

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## Bass Bug

(From page 34)

voice becomes shrill and vehement. This was one of those times. A bar fly, he told me, had informed him that I had desecrated the feathered beauty of René. As a result, the bird no longer talked but sulked in his cage, emitting only violent grunts. The chances were René would never talk again. Nicky also stated that if I ever again entered his premises he would personally run me through endless times with the biggest carving knife in the kitchen. I hung up sadly, calling down curses on the drunk who had seen me snip René's tail feathers.

My feet dragged a little as I returned to the kitchen. I thought I knew what a martyr suffered, but there was more to come. Standing before the card table was the Lady. In her hand she held my creation. She was not admiring it. She pointed to the tell-tale green feathers. "Moths, eh?" she whispered and there was something sinister in her voice. That was just the start of what proved to be a very unhappy evening. The hope of an income of \$35,000 a week which I proffered, was discarded with scorn. The mandate was inexorable; I would make no more bass bugs.

The next day I went into Fred Johnson's store and put down a few blue chips for some commercial bass bugs. Two days later I tried them out. To my delight, I discovered they worked perfectly, took some nice bass. As a matter of cold fact, I

snagged three handsome bass that afternoon. Just as I pulled in to shore I heard a shout from an approaching boat. It was Willie, the guy who mows our lawn, takes care of the flower garden, steals my liquor. He held up a stringer of the biggest bass I have ever seen—the limit.

"Gosh!", he said, and his voice trembled. "You know, mister, your missus she give me the stuff you used to make your bass flies and she give me the one bug you finished. Man, I never seen nuthin' like it! I got me a whale of a bass on every cast. And then up come a really big one—ten-pound at least. He hit that bug, snapped it off the leader and got clean away. Will yuh make me another one just like it, hey?"

"Willie," I said sadly, "I'm forced in the interest of bass conservation and good sportsmanship, to decline."

I'm afraid my super-bass-bug will never be duplicated. If I had the powers of persuasion, perhaps I might approach Mrs. Maxweldon and Nicky and beg for their cooperation. I suspect, however, that they would take a narrow and dim view of the project. Besides, I'm not anxious to see Nicky for a couple of years or so. As to the Lady, the matter hasn't been mentioned between us for nearly two weeks. If I brought up the matter of the green feathers, I think I know what would happen. I'd rather it didn't.

## Rabies in the Wild

(From page 30)

tive action to control or destroy foxes on a statewide scale, however.

The number of foxes required to be taken in any one county is not great. Usually it runs from 300 to 700—occasionally up to 1200 or 1500. The Service operated in ten counties in Georgia during fiscal year 1948, removing approximately 3200 foxes and twenty-four bobcats. Rabies in foxes was reported from twenty-nine counties in Georgia during the year, compared with forty-two the preceding year.

During the year 237 head of livestock, valued at \$11,875, were lost due to rabies, compared with 2570

head, valued at \$100,000, the year before. This was in the fox rabies counties, but there is no way of knowing just how much of the loss is attributable to rabid foxes. It is believed, on the basis of evidence and observations, that they are responsible for more than fifty percent.

According to Georgia State Health Department records for the entire state in 1946, there were 1735 people given anti-rabies treatment, of which 106 had been bitten by rabid foxes. In 1947, there were 1358 treated, of which sixty-one had been bitten by foxes. Meanwhile, the State Health Department, in cooperation with local health units and other authorities, is carrying on an extensive program of dog vaccination and quarantine.

Many states cooperating with the Service throughout the years took the slogan: "Kill the coyote and muzzle the dog. It is better to be sure (and alive) than sorry (and dead)."

## Controlling "Forest Predators"

(From page 21)

than 100 million acres of southern forest land are being overrun by the "weed trees." Loss in pine development is estimated at from \$2 to \$3 an acre for every year these undesirables are allowed to crowd out profitable timber. This means an annual loss of from \$200,000,000 to \$300,000,000 to forest industry.

Both experimentally and in actual practice, a number of methods of applying "Ammate" to trees have been evolved. Most practical has been the "frill"—a complete ring of single ax strokes around the tree, cutting through the bark and into the sapwood, leaving an actual frill of wood into which "Ammate" solution can be poured. More effective but also more costly from a labor standpoint are "cups," made with two ax strokes, one about two inches above the other and prying out the chip between to leave a pocket into which crystals of "Ammate" weed killer may be deposited.

The lower the cups are placed, the less sprouting is likely to occur. Two cups on opposite sides are sufficient for a tree that is six inches or less in diameter at breast height. For larger trees, cups should be not more than six inches apart around the tree. A tablespoonful of crystals per cup should be applied for most of the common oak species.

Costs are difficult to specify, for this will depend on the number of trees per acre to be treated, and their size, plus the terrain of the country and the amount of brush that impedes the tree-poisoning crew.

One Louisiana operator treated 3500 acres two years ago, cutting all trees under five inches in diameter and poisoning the larger ones. On twenty acres where accurate costs were figured, the average for labor, supervision, tools and "Ammate" was \$2.43 an acre. Another company in the same state kept figures on treating all trees six inches in diameter or larger on 3170 acres, and came out with an average of \$2.30 an acre.

At Bigwoods Experimental Forest in Hertford County, North Carolina, all hardwoods five inches or larger in diameter were poisoned on about 150 acres. Trees treated per acre ran from sixteen to fifty and costs per acre varied from \$1.44 to \$3.40.

One southern timberland operator, comparing the "Ammate" treatment in "frills" with two-hack girdling of the trees without any chemical treat-

ment, declared that the total cost per tree was less and that results of the treatment were apparent sooner. Trees began losing their leaves a few days after being poisoned, he said, opening up the canopy above the stunted pine seedlings and allowing the pines to make good growth the first season after treatment.

Another Louisiana lumberman, whose company had treated over 1500 acres with a five-man crew, had an interesting comment on the effects of tree poisoning. Fire-fighting crews experience less trouble in getting through woods after hardwood growth has been poisoned, he stated. Where a tree has been girdled, the sprouts grow out in a mass and often block passage, whereas no sprouts were present when poison had penetrated the root system.

With small trees, more efficiently cut than poisoned, two ax strokes are used to leave a V-notched stump. Into this notch, crystals of "Ammate" weed killer are placed. These are absorbed into the roots and sprouting is inhibited.

This entire hardwood problem is bringing about an evolution in the thinking and plans of lumbermen. In some bottomland areas, where the encroaching hardwoods are of marketable types, and where the maintaining of a pine stand has become increasingly difficult, there may be a general conversion to hardwood forests on an economically sound basis. But much of the upland timber country is geared to pine production, its pocket-book slung over a low branch of the more rapidly growing pine crop. In these sections, the scrub hardwood must be looked upon as a "predatory tree" and dealt with accordingly if future generations of poles, pulpwood and sawlogs are to be produced.



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## "HOW-TO-DO" BOOKLETS

The United States Government offers many handbooks and manuals on the subject of house care and repair, and hobbies. Here is a list of helpful guides to crafts and job practices in the home.

TITLE	Catalog Order No.	List Price
Light Frame House Construction	FS5.123:145	\$ .45
Technique of House Nailing	HH2.2:N14	.15
Selection of Lumber for Farm and Home Building	A1.9:1756	.15
Selection, Installation, Finish, and Maintenance of Wood Floors for Dwellings	A1.4/2:489	.10
Building with Logs	A1.38:579	.20
Preventing Damage to Buildings by Subterranean Termites and Their Control	A1.9:1911/3	.15
How to Judge a House	C1.14:H81	.25
Fireplaces & Chimneys	A1.9:1889	.15
Landscaping The Farmstead	116.54/3:189	.25
Pointers on Making Good Lawns	A1.10/a:L427	.05
Growing Annual Flowering Plants	A1.9:1171/3	.15
Care and Repair of the House	C13.4:489	.50
<b>YOU CAN MAKE IT SERIES</b>		
Vol. 1.—You Can Make It		
Vol. 2.—You Can Make It For Camp and Cottage		
Vol. 3.—You Can Make It For Profit		
Set of 3 pamphlets	C1.14:L97/9	.45
Maintenance and Care of Hand Tools	W1.35:9-867	.30
Use of Tools	N17.25:T61/2/945	.65
Woodworking and Furniture Repair	W1.35:5-613	.50
<b>PHOTOGRAPHY (2 volumes)</b>		
Vol. 1. Fundamentals—	N17.25:P56/2/947/vol. 1	1.25
Vol. 2. Specialized Fields—	N17.25:P56/2/947/vol. 2	1.25
Culture of Orchids	A1.35:206	.05
Handbook for Recreation Leaders	FS3.209:231	.25
Attracting Birds	1-1.72.1/2	.10
Camp Stoves and Fireplaces—	Y3.EM3:2C15/1-2	.50
Home Tanning of Leather and Small Fur Skins	A1.9:1334/7	.10
Homes for Birds	1-1.72.1/4	.10
Roses for the Home	A1.9:750	.15
House Plants	A1.9:1872/1-2	.10
Make It of Leather	C18.27:190	.15
Fed. Government Work for Young Men	CS1.48:15/3	.10

Your order for any of the above publications should be sent direct to Superintendent of Documents, Government Printing Office, Washington 25, D. C. Refer to Catalog Order No. and send payment in money order or cash (no stamps or checks).

## Time and No Fire

(From page 15)

and snows of the famed Cascades. Beyond were the pines. Somebody spoke of them, and of the thriving forestry program of the Biles-Coleman Lumber Company and the Indian Service over in the Okanogan country.

It was my turn to remark that such utilization in the woods had never been seen since the skeeterbees of Paul Bunyan's time—they were big as elk and had bills in front and stingers behind. When they caught a logged and utilized him, nothing was left to show for it but a small scatter of bones and over them the skeeterbees resting and picking their teeth.

The Cub Scouts showed considerable interest in hearing more agreeable gruesome details of the kind but they were reminded we were up on business. They were shown how the snags were felled in the logging, mainly to lay low the worst fire hazard in the Douglasfir, but also for their yield of sound wood. More of this was to be seen later. The seed blocks and strips left by the loggers were pointed out and explained. The standard forestry practice in harvesting the Douglasfir and West Coast hemlock stands was to clear-cut a given area—forty acres up to 160—and leave seed-source trees to the east of it, located so that the dry east winds of late fall would open the cones and bear the winged seeds to the places that needed them for the growing of future forests.

"Then give the trees time," Billy Entwistle repeated. "Time, and no fire."

He went on to demonstrate fire fighting tools and such tricks as use of the backpack pump. I talked with the foresters about the full forestry picture of the Pacific Northwest in relation to the sampling we were seeing today. Keeping as clear as we could from statistics, it looked this way:

Those 75,000 acres of reforestation we viewed 1500 feet below fairly well represented the more than 7,500,000 acres of the younger surveyed and classified forests of the Douglasfir region—on all ownerships. There were more millions of acres of second-growth sawtimber to consider, and still more hundreds of thousands of acres of unsurveyed recent cut-overs.

Forestry as an act on the land was struggling through birth and the

growing pains of infancy in the Douglasfir region when loggers cut the old timber from Whidbey Island, the shores of Puget Sound, the Sultan Basin. Fire ran free. Yet the new crop came through amid most of the stumps. And now the gaps were being planted by both government and industry. All the agencies were cooperating like members of one lodge to stop fire and grow trees.

Down the Sultan and Snohomish valleys the farmers, with their own forest products cooperative and the support of the Soil Conservation Service and the forest industries, were in a woodlot forestry program that is nationally known. New products, new plants promised increasing markets for everything that grew in the woods. There were even outlets for huckleberry brush and salal. National advertising programs of the West Coast Lumbermen's Association and other forest industry groups were creating preference among consumers all over the country for lumber products from the region.

An hour later we were back down in the basin, after stops to nail up "Keep Washington Green" signs along the lower road. Here a clearing opened in a dense roadside stand of fir and hemlock around twenty years old. An immense fir windfall that had been left in the logging and a giant snag that had stood through it and succeeding years, had lately been worked over for a yield of peeler logs. Two butts and another cut were left as fit only for fuelwood. The delayed gleaming from the harvest of twenty-five years or more ago served as a prime example of the changes in market demand that had made for progress in forestry.

"At that time dead trees were passed by, and if there were standing snags they were left to be fire threats," said Billy Entwistle. "Bothering with them then could only lose the logger money. Now it pays to glean such timber. The wonder is that it lasts so well—dead trees long before the logging, and still good wood."

The leftovers were, by rough estimate, well over 800 years old at their deaths. The biggest butt could have had 1200 years in it. They were remnants of the grandfathers of the twenty-year-old trees. The parent trees had been around 200 years old at the logging.



"Back in my early time," said Billy Entwistle, "only trees that could be hauled by bullteam easy to tidewater were valued. All the way through my time as a logger the forest itself had no value, only the trees in it that could be taken out and sold at a profit. Often the profit failed to show up. Most of the pioneers saw the forest as in the way, an obstacle to farming. Everybody but the Indians burned it."

"I learned at school that the Indians burned the forests everywhere to make better hunting grounds," said one of the Cub Scouts.

"You learned a wrong thing, son," said the veteran fire warden. "The Indians did not set the fires that never let me see the sun all summer when I was a boy. The Indians had been here for 10,000 years and more before 1870, when the summer burnings began to cloud the whole country. Prospectors, ranchers, stockmen, homesteaders, hunters—all white—fired the forests to clear them out.

"No one dreamed that timber could ever become scarce. Of all things trees were the cheapest—why, trees were free! White men burned wonderful forests just to make trails for easier travel. Many traveled the waterways by boats and canoe, camping overnight on the beaches. If their beach fires, which they left burning usually, started forest fires no one was concerned. Then fire was used regularly in logging to clear roads and skid-trails. This was true even in 1910. In that bad fire year I saw burning logs loaded on flat cars and hauled smoking to the booming grounds.

"Never blame the Indians, who loved their home country, for the fires of the old days. And let's not be too morally proud of the record we are making against the fire enemy. Now we know it pays. Now all trees have value. Nobody needs to tell lads your age that these little stems of twenty-year-old trees will be worth real money to you or others like you thirty to fifty years from now."

The boys grew restless. They looked around for things to do and decided to adorn the remains of the forest ancients with the posters that read, "Keep the Skies Blue—Keep Washington Green." Up the road they had found themselves without nails. Billy Entwistle had provided them. Now they came to him for more.

"In the woods always pack a few nails along," he advised. "A man never knows when he may need a nail."

We oldsters rested for a spell in the shade of timber that had first sprouted on this soil so long ago that their time was hard to realize. They made Billy Entwistle's eighty-six years seem few. A breeze whispered from the forest of twenty-year-old trees. The age of Harry and Stuart was nine and Kenny was eight. The breeze, the wind, was from the West. It was as old as the land itself.

Time and trees. Man's place in nature. Something to think about.

"Time and no fire," said Billy Entwistle again. "The main thing. The big need."

## Ivory-Billed Woodpecker Still With Us

The ivory-billed woodpecker, already tentatively listed on the roster of exterminated species, still survives, according to the Wildlife Management Institute.

Two of the big woodpeckers, almost removed from the American scene by the destruction of the primeval forests, recently were discovered by an expedition led by Whitney H. Eastman, Minneapolis business executive and amateur ornithologist. The survivors were found in Florida, the National Audubon Society stated. None of the ivory-bills have been reliably reported since 1947. The pileated woodpecker is frequently mistaken for the ivory-bill and the close resemblance between the two birds has confused the status of the rare species.



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## Financial Statement

The American Forestry Association

### BALANCE SHEET AS OF DECEMBER 31, 1949

ASSETS		LIABILITIES AND SURPLUS	
Cash	\$14,121.74	Accounts Payable	\$6,702.68
Notes Receivable	278.16	Notes Payable	15,000.00
Accounts Receivable	2,222.40	Deferred Income	70,501.47
Accrued Interest Receivable	346.41	Reserves for Forest Program	
Inventories	15,916.27	and Miscellaneous Fund	5,019.35
Deferred Charges	13,010.84	Surplus	165,837.39
Deposits and Advances	1,202.14		
Furniture and Fixtures	5,097.25		
Endowment Fund Assets	210,865.68		
<b>TOTAL</b>	<b>\$263,060.89</b>	<b>TOTAL</b>	<b>\$263,060.89</b>

### INCOME AND EXPENSE ACCOUNT FOR THE TWELVE MONTHS PERIOD ENDING DECEMBER 31, 1949

EXPENSE		INCOME	
General Administration	\$45,664.29	Membership Dues	\$144,490.46
<b>AMERICAN FORESTS</b>		Advertising	23,839.18
Magazine	89,944.77	Interest	4,184.86
Membership	79,531.59	Donations and Bequests	5,331.93
Forester's Office	14,387.53	Sale of Publications	8,687.42
Advertising Expense	8,099.20	Miscellaneous	6,077.61
Operating Overhead	5,072.32	Excess of Expenses over Income	53,602.45
Miscellaneous	3,714.21		
<b>TOTAL</b>	<b>\$246,413.91</b>	<b>TOTAL</b>	<b>\$246,413.91</b>



AFA's annual meeting plans are shaping up into something big. We are trying out two new ideas this year which look like good bets. First, we have a number of active committees at work in Wisconsin arranging all details. Secondly, we are planning to make the meeting mostly a series of outdoor tours to see what is being done and how it is being accomplished.

All the planning is being spark-plugged by a committee of Wisconsin people headed up by Folke Becker, D. Clark Everest, M. N. Taylor, Ernest Swift and Vic Isola, with a number of subcommittees operating under them. We had the pleasure of meeting with some thirty-five of the various committee members in Wisconsin recently to plan final details of the meeting.

We honestly believe this is going to be one of the most interesting and successful meetings AFA has held.

Dr. James P. Adams, Provost of the University of Michigan, will be the featured speaker at the banquet. Our Wisconsin friends are putting their hearts into making it a great success. They are anxious for AFA members to be their guests. Full details of the meeting are described elsewhere in the magazine this month. We urge you to send in your registrations as soon as possible.

**Ovid Butler's Forest Progress** Committee is now assembling its final reports from some thirteen different task force chairmen. The report will cover what has happened in American forestry during the past five years, 1944-1949, as regards AFA's Program for American Forestry. The report will indicate where the strength and weakness lie in forestry programs in the country. It is expected that the report will be completed by the latter part of this summer.

AFA's Water Committee has submitted, at the request of Morris L. Cooke, chairman of President Truman's Water Policy Commission, its recommendations of things which are considered important in the development of a national program of water conservation. AFA's committee feels that much more consideration needs to be given to the interrelations of land and water; that flood prevention devices need to be worked out on the basis of hundreds of small watersheds in the nation; that such projects should involve the cooperative work of federal, state and local governments and private interests and that their control and management should be local.

The President's Committee has a tough and challenging job ahead of it and has asked many organizations in the country for suggestions. It is holding a number of hearings in various sections of the United States. We hope that the committee will continue an unbiased analysis of all factors and come up with a recommended program in which all interests can have a part.

**The Association of State Foresters** will hold its annual meeting at Salt Lake City on September 25, 26 and 27. The Association has been invited to meet with this group and to discuss with them ways and means in which AFA can help the states.

We are very much encouraged by the tremendous progress made by the state forestry departments in the last five years. The reports of our AFA

## THE AMERICAN FORESTRY ASSOCIATION

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Progress Committee certainly indicate that state forestry operations have grown into a tremendous business. The past five years have probably seen greater advancements than in any previous period in the nation's forest history.

**"Forest Fire,"** AFA's four-color cartoon booklet on forest fire prevention as told by Smokey Bear, went to press for its first printing of 150,000 this month to supply orders for several industries and organizations throughout the country. Smokey Bear is a national character developed by the cooperative forest fire prevention campaign of the state and federal forest services and the Advertising Council, Inc. AFA's sixteen-page booklet is tied in with this campaign, is adapted for schools and has received widespread approval from conservationists, teachers and school children.

Copies for local use, fairs, exhibits, meetings, schools, etc., may be ordered direct from AFA headquarters at nominal prices.

AFA has now started a new publication—a factual story of Ohio's Watershed Conservancy Law with complete information on operating costs, system of government, agency cooperation, etc., highlighted in the Muskingum Watershed Conservancy District. The booklet is to be made available as a part of the proposed Governors' Water Conference to be held in Ohio, sponsored jointly by

the State of Ohio and The American Forestry Association, plans for which are now being developed with Governor Frank J. Lausche and a committee of Ohio conservationists.

Indications are that more than 200 riders will take part in AFA's sponsored Trail Riders of the Wilderness project this summer. These guided expeditions into the remote, beautiful wilderness areas of our national forests and parks are receiving widespread recognition. They have proved increasingly popular in their fifteen years of operation. The first trip into the Smokies has now been completed and trips are under way in Montana, Idaho and Minnesota. There are a few openings left on some of the western trips, so if you AFA members want to get close to some of the grandest nature in the world for the best vacation you have ever had, drop us a line at AFA headquarters.

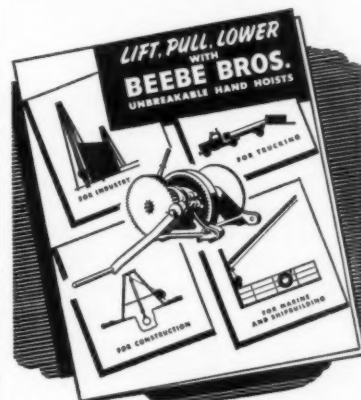
Our good friend, Walter R. Humphrey, editor of the *Fort Worth Press*, and winner of one of AFA's Conservation Awards last year, sent us a copy of the fifth annual soil conservation program sponsored by the Scripps-Howard newspapers of Texas. This comprehensive, yet down-to-earth grass-roots program has a number of outstanding awards for farmers, soil conservation districts, organizations, newspapers and businessmen as well as prizes for the best essays on soil conservation submitted by high school students. S. L. F.

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# Editorial

## WE MUST STOP CRYING THE BLUES

By S. L. FROST

Two world wars, ever-increasing international tension and a myriad of headaches at home have contributed to the building up of a fear complex in the minds of many Americans. The ponderous concepts of the conservation of natural resources, with their many and varied facets of soil erosion, devastated forests, polluted streams, vanishing wildlife, mineral deficiencies and food scarcities, to mention a few, are also exerting their part in this fear complex. One could easily assume that the whole world had gone to pot.

This shouting from the rooftops has in many ways had a therapeutical value. It has certainly helped to set in motion vast activities whereby mankind might overcome and find a way out of its dilemma. And where the land and its resources are concerned, the fear angle has shocked a lot of people into honest, forward motion. In contrast, constant crying the blues has brought about negative thinking to the point where too many people are losing faith in themselves and in their country—have forgotten the great opportunities of owning land in America and making an honest living from it.

The extent of the blues influence was forcefully brought to our attention recently while reading a group of high school essays covering a wide range of conservation subjects. The fear angle was predominant throughout. A lot of the material was "up in the clouds," dealt with policies and was very formal. Our first impression was that these young citizens were well read and well informed. Then it suddenly became apparent that what was lacking were expressions of the opportunities and benefits which can be derived through better conservation.

The essays were decidedly on the negative side. In the youngsters' thinking it was evident that flaming forest fires and blackened acres had won out over the vastly greater number of green, unburned woods. Barren acres were more deeply etched in their minds than their planted counterpart. The managed woodlot was lost in the shadow of its butchered cousin. They couldn't see the terraced fields for the gullied hillsides. The thriving farm and forest community was still a ghost town.

The great advances from research were not ap-

parent. Nor were there indications of the trend under way by government, industries, landowners and various organizations to achieve objective goals in conservation. New jobs, new wealth, better farms, better communities, more prosperous people and businesses were never mentioned. Young America had missed the boat.

Where were examples of conservation activity?—of greater income from better land use? Where were indications that the dollar sign is still important? That people have been rolling up their sleeves to earn more by applying to the land all the things being learned every day in our laboratories, colleges, fields and forests? Had these exciting grass-root opportunities dried up in the more powerful fear complex?

Surely, if future citizens view conservation as wrapped up in a black crepe, we have cause for concern. We are educating a generation of mourners.

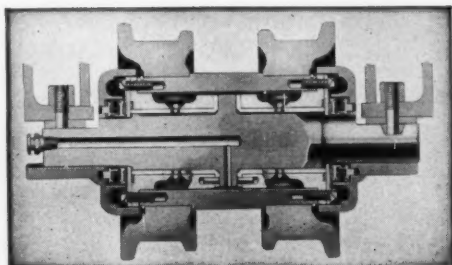
Have we closed our eyes to the mighty job now under way on many fronts in rebuilding America's land resources? Reports of government, state and industry are indications of the progress being made. Any trip through the country will attest to better farms and forests. True, the ill practices are still apparent and cannot be denied, but they shouldn't blind us to the good work being done.

What a golden opportunity presents itself to our policy makers, our educators, our press and radio, our civic groups, our businessmen to build a faith in America and its land. These are the people who are in a position to encourage more youth activity on the land, to point out the opportunities.

In these days of world oppression, we Americans should be ever on guard not to succumb to the fear complexes. It is even more important that we face our problems with a practical view, particularly in the encouragements we give our youth. Just as there is great danger in hiding our heads in the sand, there is calamity confronting us if we become like the lad of fable tales who cried "Wolf!" so much no one believed him.

Why not talk about our opportunities? Why not accentuate the positive? Why not instill young Americans with a vision and a faith?

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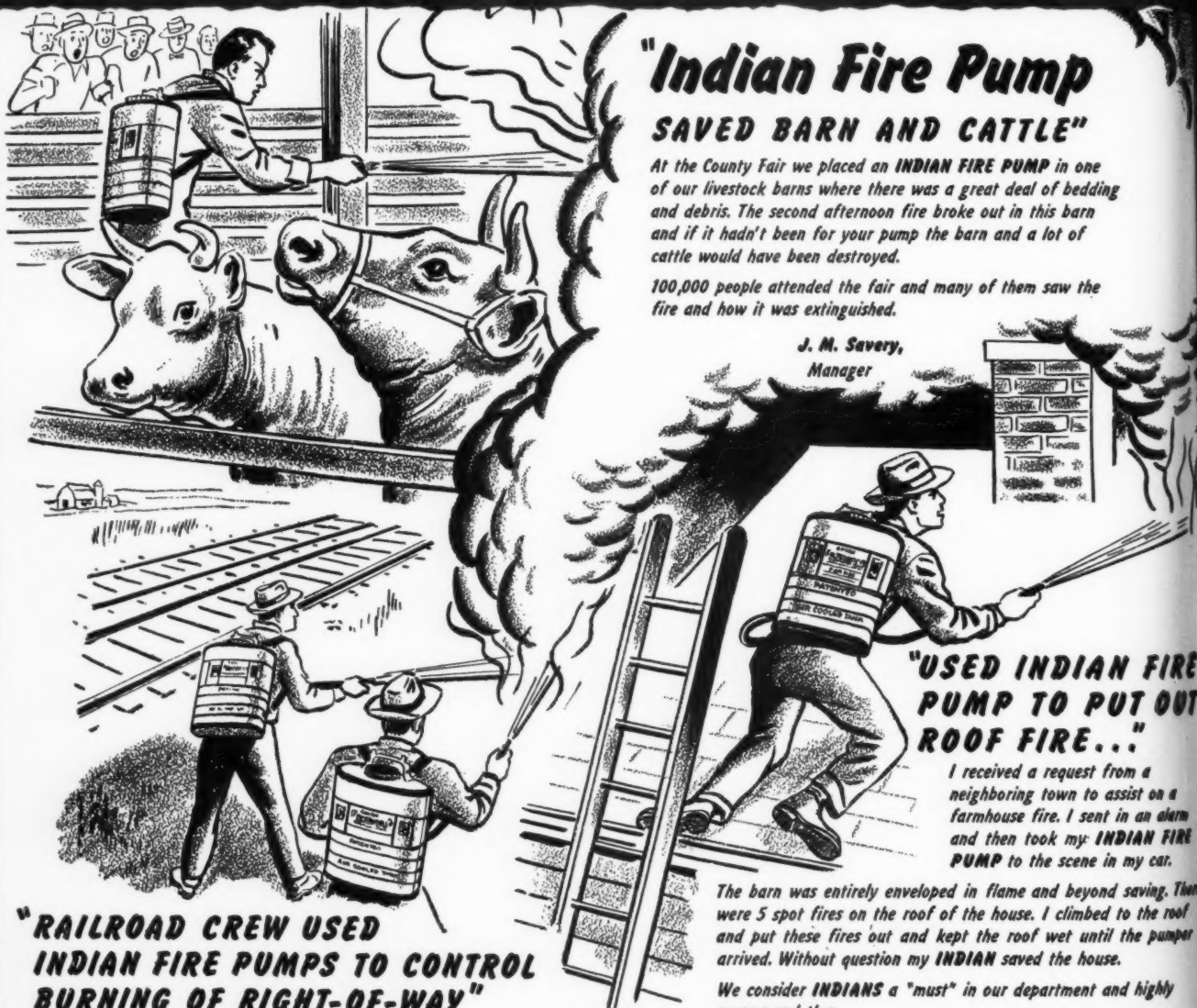
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